



EST. 1960

# Willowbrook

835 Midway Drive  
Willowbrook, IL 60527-5549

Phone: (630) 323-8215 Fax: (630) 323-0787 [www.willowbrookil.org](http://www.willowbrookil.org)

## Mayor

Frank A. Trilla

## Village Clerk

Leroy R. Hansen

## Village Trustees

Sue Berglund

Umberto Davi

Terrence Kelly

Michael Mistele

Gayle Neal

Paul Oggerino

## Village Administrator

Tim Halik

## Chief of Police

Mark Shelton



Proud Member of the  
Illinois Route 66 Scenic Byway

## AGENDA

REGULAR MEETING OF THE MUNICIPAL SERVICES COMMITTEE TO BE HELD ON MONDAY, JUNE 13, 2016, AT 5:30 P.M. AT THE VILLAGE HALL, 835 MIDWAY DRIVE, IN THE VILLAGE OF WILLOWBROOK, DUPAGE COUNTY, ILLINOIS.

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF MINUTES:
  - a) May 9, 2016 Regular Meeting of the Municipal Services Committee
4. DISCUSSION – 2016 Motor Fuel Tax (MFT) Funded Roadway Maintenance Program
5. REPORT – Municipal Services Department:
  - a) May 2016 Monthly Permit Activity Report
  - b) April 2016 Water System Pumpage Report
  - c) April & May 2016 Scavenger Reports
  - d) May 2016 Mosquito Abatement Program Update
6. VISITOR'S BUSINESS  
(Public comment is limited to three minutes per person)
7. COMMUNICATIONS
8. ADJOURNMENT

MINUTES OF THE REGULAR MEETING OF THE MUNICIPAL SERVICES  
COMMITTEE OF THE VILLAGE OF WILLOWBROOK HELD ON MONDAY,  
MAY 9, 2016 AT THE VILLAGE HALL, 835 MIDWAY DRIVE, IN THE  
VILLAGE OF WILLOWBROOK, DUPAGE COUNTY, ILLINOIS

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1. CALL TO ORDER

Chairman Mistele called the meeting to order at 5:30 PM.

2. ROLL CALL

Those present at roll call were Chairman Michael Mistele, and Village Administrator Tim Halik. Absent: Trustee Paul Oggerino

3. APPROVAL OF MINUTES

- a) After review of the draft minutes from the February 8, 2016 regular meeting of the Municipal Services Committee, Chairman Mistele made a motion to approve the minutes as presented.

4. DISCUSSION – Phase II Master Facilities Plan: Police Building Renovation – Completion of Design Development

Administrator Halik advised the Committee that the Design Development Phase of the police renovation/expansion project is nearing completion. On April 18, 2016, the following list of documents were received from Williams architects for final review:

- Design Development Plans, consisting of one (1) bound set
- Project Manual, consisting of one (1) binder
- Product Data Catalog, consisting of one (1) binder

Halik advised that these documents were disseminated to the project development team for final review. Review comments have been identified and a meeting with Williams Architects will take place the week of May 9th to review all comments. Once all issues have been addressed, authorization to proceed to the Construction Document Phase will be given. Once authorization to begin the Construction Document Phase is provided to Williams, they will begin drafting construction drawings and all ancillary documentation, including bid documents, to enable the project to be issued for public bid. Halik advised that within the packet was the Project Schedule which depicts the duration of the Construction Documents Phase to be 12 weeks once authorization is received. The project will then be put out to public bid in August 2016.

5. DISCUSSION – Update: Status of IEPA Loan Approval / Standpipe Re-Painting Project

Administrator Halik advised the committee that staff continues to work towards obtaining final IEPA approval of our SRF Loan application and receiving a loan commitment. Halik shared that we seem to be nearing the end of the review phase of the loan application, have taken the necessary Board action, and have completed all public notice requirements. Halik also reminded the Committee that in February of this year we opened public bids for the blasting and repainting of the standpipe water tower. At that time, we received a very favorable bid price from Am-Coat Painting in the amount of \$931,000. This price was approximately \$600,000 lower than our engineers estimate of probable cost for this project. Therefore, we

really don't want to lose this bid, but Am-Coat's crews are very anxious to start the project. No work can start prior to receiving final loan approval from the IEPA. Halik shared that both he and the consulting engineer have been in contact with the owner of Am-Coat Painting, and have begun reviewing the project shop drawings. In addition, we have obtained a certificate of insurance from Am-Coat and have allowed them to begin mobilizing some of their equipment on the water tank site. Halik hopes that final IEPA approval is forthcoming so we can issue a Notice to Proceed to the contractor. Chairman Mistele encouraged staff to continue to work with the contractor as much as we can.

6. REPORT – Municipal Services Department

- a. Administrator Halik reviewed the monthly permit activity report for the months of February, March, and April 2016. Halik advised that the Village received about \$9,400 in permit revenue for the month of February, about \$32,000 in the month of March, and about \$25,600 in the month of April. Therefore, a total of \$369,447 in permit review was received in fiscal year 2015/16. This amount is 184% of the total budgeted amount of revenue of \$200,000. Chairman Mistele asked how much the anticipated revenue budget is for the current year. Halik said that he would look that number up and get back to him.
- b. Administrator Halik shared the water system pumpage report for March 2016. The report indicates that the Village pumped 26,552,000 gallons of water in the month, bringing the total amount pumped for the first eleven months of the fiscal year to 326,065,000 gallons. Halik stated that we have pumped about 1% more water so far this year as compared to the same time frame last year. Halik shared that we are on track in reaching our estimated pumpage projection of 350,000,000 gallons. A discussion ensued regarding the appropriate pumpage projection to be used for next fiscal year. After review of the usage trend and other factors pertaining to water consumption, etc., it was agreed that same 350,000,000 gallon figure should be used.
- c. Administrator Halik shared the February and March 2016 scavenger reports from the vendor, Republic Services. This report contains information pertaining to the tons of refuse and recyclable material collected by the scavenger in Willowbrook each month. Chairman Mistele that that the report contains good information.

7. VISITOR'S BUSINESS

(None)

8. COMMUNICATIONS

(None)

9. ADJOURNMENT

Motion to adjourn was made by Chairman Mistele. The meeting was adjourned at 5:40 PM.

(Minutes transcribed by: Tim Halik, 6/8/16)

**MUNICIPAL SERVICES COMMITTEE MEETING  
AGENDA ITEM SUMMARY SHEET**

**AGENDA ITEM DESCRIPTION**

**DISCUSSION –**

**2016 Motor Fuel Tax (MFT) Funded Roadway Maintenance Program**

**COMMITTEE REVIEW**

- Finance/Administration
- Municipal Services
- Public Safety

Meeting Date:  
June 13, 2016

- Discussion Only
- Seeking Feedback
- Regular Report
- Approval of Staff Recommendation (for consideration by Village Board at a later date)
- Approval of Staff Recommendation (for immediate consideration by Village Board)
- Report/documents requested by Committee

**BACKGROUND**

At the February 8, 2016 Village Board meeting, the Board adopted the annual IDOT resolution allocating the use of up to \$442,142 in motor fuel tax (MFT) funds for both the Village's 2016 Roadway Maintenance Program and the local share of the Clarendon Hills Road STP project. The 25% local share Clarendon Hills Road project is estimated to be approximately \$193,750 which will leave about \$248,392 in funding for the 2016 Road Maintenance Program.

Our plan for the 2016 season was to continue roadwork within the Waterford subdivision. However, it is the Village's policy to first survey all Village roadways after the winter season to determine whether other roadways are in need of priority maintenance. This year's Village-wide road survey revealed that roads within the southwest quadrant of town are in much worse maintenance condition than the remaining streets within the Waterford Subdivision. Therefore, it was decided that the 2016 program should include work within the Village's southwest quadrant.

**REQUEST FOR FEEDBACK (if any)**

As a result, staff recommends that this year's road maintenance program consist of the following scope of work as a base bid: The milling and overlay of select Village streets (listed below), full depth patching throughout town, crack filling in select areas (listed below), and replacement of pavement markings.

STREET RESURFACING	
STREET	LIMITS
Arlene Ave.	75 <sup>th</sup> Street to Eleanor Place
75 <sup>th</sup> Place	Eleanor Pl. to Arlene Ave.
Eleanor Pl.	75 <sup>th</sup> Street to 79 <sup>th</sup> Street
Virginia Court	Eleanor Place to North Terminus

CRACK SEALING
GENERAL AREAS:
Plainfield Manor Subdivision
Executive Plaza
Southwest Quadrant (not streets being resurfaced)
Farmingdale Subdivision

In addition to the above, the resurfacing of Midway Drive was also included as an alternate bid. If favorable unit prices are obtained, staff would recommend also adding Midway Drive to the resurfacing list.

**STAFF RECOMMENDATION**

The above program was assembled in contract form and sent to IDOT for approval. After the contract document was approved, a Notice of Bid was published on June 9th in IDOT's Contractor Bulletin. The public bid opening will occur at the Village Hall on June 20, 2016 at 10:00 AM. The bid results will be brought back to the Municipal Services Committee for review and consideration on July 11, 2016.



Local Public Agency  
Formal Contract Proposal

PROPOSAL SUBMITTED BY		
Contractor's Name		
Street	P.O. Box	
City	State	Zip Code

STATE OF ILLINOIS

COUNTY OF Du Page  
Village of Willowbrook  
 (Name of City, Village, Town or Road District)

FOR THE IMPROVEMENT OF

STREET NAME OR ROUTE NO. Various Streets  
 SECTION NO. 16-00000-01-GM  
 TYPES OF FUNDS MFT

SPECIFICATIONS (required)

PLANS (required)

**For Municipal Projects**  
 Submitted/Approved/Passed  
*Frank Tall*  
 Mayor  President of Board of Trustees  Municipal Official  
 Date 5/16/16

**Department of Transportation**  
 Released for bid based on limited review  
*John Paterson* /MS  
 Regional Engineer  
 Date 6/3/16

**For County and Road District Projects**  
 Submitted/Approved  
 \_\_\_\_\_  
 Highway Commissioner  
 \_\_\_\_\_  
 Date  
 Submitted/Approved  
 \_\_\_\_\_  
 County Engineer/Superintendent of Highways  
 \_\_\_\_\_  
 Date



*Martin Bojovic*  
 exp 11-2017

Note: All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed.

RETURN WITH BID

NOTICE TO BIDDERS

County Du Page
Local Public Agency Willowbrook
Section Number 16-00000-01-GM
Route Various Streets

Sealed proposals for the improvement described below will be received at the office of The Village Clerk of The Village of Willowbrook, 835 Midway Drive, Willowbrook, IL 60527 until 10:00 AM on June 20, 2016

Sealed proposals will be opened and read publicly at the office of The Village Clerk of The Village of Willowbrook, 835 Midway Drive, Willowbrook, IL 60527 at 10:00 AM on June 20, 2016

DESCRIPTION OF WORK

Name 2016 MFT Road Program - Various Streets Length: 7800.00 feet ( 1.47 miles)
Location Midway Dr (Resurfacing of Midway ALTERNATE BID ONLY)
Proposed Improvement HMA Surface Removal, HMA Surface Overlay, Class D Patching (Special), Crack Filling

Thermoplastic Pavement Marking Striping, and Adjust Frames and Lids

1. Plans and proposal forms will be available in the office of Willowbrook Village Hall, 835 Midway Drive, Willowbrook, IL 60527, FOR NON-REFUNDABLE FEE OF \$35.00 PAYABLE TO VILLAGE OF WILLOWBROOK
Contact Name: Tim Halik
Telephone: (630) 920-2238
Address

- 2. [X] Prequalification
If checked, the 2 low bidders must file within 24 hours after the letting an "Affidavit of Availability" (Form BC 57), in duplicate, showing all uncompleted contracts awarded to them and all low bids pending award for Federal, State, County, Municipal and private work. One original shall be filed with the Awarding Authority and one original with the IDOT District Office.
3. The Awarding Authority reserves the right to waive technicalities and to reject any or all proposals as provided in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals.
4. The following BLR Forms shall be returned by the bidder to the Awarding Authority:
a. BLR 12200: Local Public Agency Formal Contract Proposal
b. BLR 12200a Schedule of Prices
c. BLR 12230: Proposal Bid Bond (if applicable)
d. BLR 12325: Apprenticeship or Training Program Certification (do not use for federally funded projects)
e. BLR 12326: Affidavit of Illinois Business Office

## RETURN WITH BID

5. The quantities appearing in the bid schedule are approximate and are prepared for the comparison of bids. Payment to the Contractor will be made only for the actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as hereinafter provided.
6. Submission of a bid shall be conclusive assurance and warranty the bidder has examined the plans and understands all requirements for the performance of work. The bidder will be responsible for all errors in the proposal resulting from failure or neglect to conduct an in depth examination. The Awarding Authority will, in no case be responsible for any costs, expenses, losses or changes in anticipated profits resulting from such failure or neglect of the bidder.
7. The bidder shall take no advantage of any error or omission in the proposal and advertised contract.
8. If a special envelope is supplied by the Awarding Authority, each proposal should be submitted in that envelope furnished by the Awarding Agency and the blank spaces on the envelope shall be filled in correctly to clearly indicate its contents. When an envelope other than the special one furnished by the Awarding Authority is used, it shall be marked to clearly indicate its contents. When sent by mail, the sealed proposal shall be addressed to the Awarding Authority at the address and in care of the official in whose office the bids are to be received. All proposals shall be filed prior to the time and at the place specified in the Notice to Bidders. Proposals received after the time specified will be returned to the bidder unopened.
9. Permission will be given to a bidder to withdraw a proposal if the bidder makes the request in writing or in person before the time for opening proposals.

RETURN WITH BID

PROPOSAL

County Du Page
Local Public Agency Willowbrook
Section Number 16-00000-01-GM
Route Various Streets

1. Proposal of

for the improvement of the above section by the construction of 2016 MFT Road Program - Various Streets
HMA Surface Removal, HMA Surface Overlay, Class D Patching (Special), Crack Filling, Thermoplastic Pavement Marking
Striping, and Adjust Frames and Lids

a total distance of 7800.00 feet, of which a distance of 7800.00 feet, ( 1.47 miles) are to be improved.

- 2. The plans for the proposed work are those prepared by Christopher B. Burke Engineering, LTD and approved by the Department of Transportation on
3. The specifications referred to herein are those prepared by the Department of Transportation and designated as "Standard Specifications for Road and Bridge Construction" and the "Supplemental Specifications and Recurring Special Provisions" thereto, adopted and in effect on the date of invitation for bids.
4. The undersigned agrees to accept, as part of the contract, the applicable Special Provisions indicated on the "Check Sheet for Recurring Special Provisions" contained in this proposal.
5. The undersigned agrees to complete the work within 25 working days or by unless additional time is granted in accordance with the specifications.
6. A proposal guaranty in the proper amount, as specified in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals, will be required. Bid Bonds will be allowed as a proposal guaranty. Accompanying this proposal is either a bid bond if allowed, on Department form BLR 12230 or a proposal guaranty check, complying with the specifications, made payable to:

The Village of Willowbrook Treasurer of

The amount of the check is ( ).

- 7. In the event that one proposal guaranty check is intended to cover two or more proposals, the amount must be equal to the sum of the proposal guaranties, which would be required for each individual proposal. If the proposal guaranty check is placed in another proposal, it will be found in the proposal for: Section Number
8. The successful bidder at the time of execution of the contract will be required to deposit a contract bond for the full amount of the award. When a contract bond is not required, the proposal guaranty check will be held in lieu thereof. If this proposal is accepted and the undersigned fails to execute a contract and contract bond as required, it is hereby agreed that the Bid Bond or check shall be forfeited to the Awarding Authority.
9. Each pay item should have a unit price and a total price. If no total price is shown or if there is a discrepancy between the product of the unit price multiplied by the quantity, the unit price shall govern. If a unit price is omitted, the total price will be divided by the quantity in order to establish a unit price.
10. A bid will be declared unacceptable if neither a unit price nor a total price is shown.
11. The undersigned submits herewith the schedule of prices on BLR 12200a covering the work to be performed under this contract.
12. The undersigned further agrees that if awarded the contract for the sections contained in the combinations on BLR 12200a, the work shall be in accordance with the requirements of each individual proposal for the multiple bid specified in the Schedule for Multiple Bids below.













## **BID SUMMARY**

### **BASE BID**

BASE BID	\$
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(FIGURES)

**BIDDER'S PROPOSAL FOR BASE BID – VILLAGE OF WILLOWBROOK 2016 MFT PROGRAM**

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(WORDS)

### **ALTERNATE BID**

ALTERNATE BID (BASE BID PLUS RESURFACING OF MIDWAY DR)	\$
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(FIGURES)

**BIDDER'S PROPOSAL FOR ALTERNATE BID – VILLAGE OF WILLOWBROOK 2016 MFT PROGRAM**

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(WORDS)

The Village of Willowbrook reserves the right to award the contract to the lowest responsible Bidder for the BASE BID or for the ALTERNATE BID, based upon the Village's best financial interest. Each Bidder must submit bids for the BASE BID and the ALTERNATE BID to be eligible for the award of the contract. Failure to do so will result in rejection of the CONTRACTOR'S bid.

**CONTRACTOR CERTIFICATIONS**

County	<u>Du Page</u>
Local Public Agency	<u>Willowbrook</u>
Section Number	<u>16-00000-01-GM</u>
Route	<u>Various Streets</u>

The certifications hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder.

1. **Debt Delinquency.** The bidder or contractor or subcontractor, respectively, certifies that it is not delinquent in the payment of any tax administered by the Department of Revenue unless the individual or other entity is contesting, in accordance with the procedures established by the appropriate revenue Act, its liability for the tax or the amount of tax. Making a false statement voids the contract and allows the Department to recover all amounts paid to the individual or entity under the contract in a civil action.

2. **Bid-Rigging or Bid Rotating.** The bidder or contractor or subcontractor, respectively, certifies that it is not barred from contracting with the Department by reason of a violation of either 720 ILCS 5/33E-3 or 720 ILCS 5/33E-4.

A violation of Section 33E-3 would be represented by a conviction of the crime of bid-rigging which, in addition to Class 3 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be barred for 5 years from the date of conviction from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

A violation of Section 33E-4 would be represented by a conviction of the crime of bid-rotating which, in addition to Class 2 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be permanently barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

3. **Bribery.** The bidder or contractor or subcontractor, respectively, certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the State of Illinois or any unit of local government, nor has the firm made an admission of guilt of such conduct which is a matter of record, nor has an official, agent, or employee of the firm committed bribery or attempted bribery on behalf of the firm and pursuant to the direction or authorization of a responsible official of the firm.

4. **Interim Suspension or Suspension.** The bidder or contractor or subcontractor, respectively, certifies that it is not currently under a suspension as defined in Subpart I of Title 44 Subtitle A Chapter III Part 6 of the Illinois Administrative Code. Furthermore, if suspended prior to completion of this work, the contract or contracts executed for the completion of this work may be cancelled.

RETURN WITH BID

SIGNATURES

County	<u>Du Page</u>
Local Public Agency	<u>Willowbrook</u>
Section Number	<u>16-00000-01-GM</u>
Route	<u>Various Streets</u>

(If an individual)

Signature of Bidder \_\_\_\_\_

Business Address \_\_\_\_\_

(If a partnership)

Firm Name \_\_\_\_\_

Signed By \_\_\_\_\_

Business Address \_\_\_\_\_

Inset Names and Addressed of All Partners

} \_\_\_\_\_

} \_\_\_\_\_

} \_\_\_\_\_

} \_\_\_\_\_

(If a corporation)

Corporate Name \_\_\_\_\_

Signed By \_\_\_\_\_

President

Business Address \_\_\_\_\_

Inset Names of Officers

} President \_\_\_\_\_

} Secretary \_\_\_\_\_

} Treasurer \_\_\_\_\_

Attest: \_\_\_\_\_  
Secretary



RETURN WITH BID

Route Various Streets
County Du Page
Local Agency Willowbrook
Section 16-00000-01-GM

PAPER BID BOND

WE \_\_\_\_\_ as PRINCIPAL,

and \_\_\_\_\_ as SURETY,

are held jointly, severally and firmly bound unto the above Local Agency (hereafter referred to as "LA") in the penal sum of 5% of the total bid price, or for the amount specified in the proposal documents in effect on the date of invitation for bids whichever is the lesser sum. We bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly pay to the LA this sum under the conditions of this instrument.

WHEREAS THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that, the said PRINCIPAL is submitting a written proposal to the LA acting through its awarding authority for the construction of the work designated as the above section.

THEREFORE if the proposal is accepted and a contract awarded to the PRINCIPAL by the LA for the above designated section and the PRINCIPAL shall within fifteen (15) days after award enter into a formal contract, furnish surety guaranteeing the faithful performance of the work, and furnish evidence of the required insurance coverage, all as provided in the "Standard Specifications for Road and Bridge Construction" and applicable Supplemental Specifications, then this obligation shall become void; otherwise it shall remain in full force and effect.

IN THE EVENT the LA determines the PRINCIPAL has failed to enter into a formal contract in compliance with any requirements set forth in the preceding paragraph, then the LA acting through its awarding authority shall immediately be entitled to recover the full penal sum set out above, together with all court costs, all attorney fees, and any other expense of recovery.

IN TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers this \_\_\_\_\_ day of \_\_\_\_\_

Principal

(Company Name)

(Company Name)

By: \_\_\_\_\_ (Signature and Title)

By: \_\_\_\_\_ (Signature and Title)

(If PRINCIPLE is a joint venture of two or more contractors, the company names, and authorized signatures of each contractor must be affixed.)

Surety

(Name of Surety)

(Signature of Attorney-in-Fact)

STATE OF ILLINOIS,

COUNTY OF \_\_\_\_\_

I, \_\_\_\_\_, a Notary Public in and for said county, do hereby certify that \_\_\_\_\_

(Insert names of individuals signing on behalf of PRINCIPAL & SURETY)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of PRINCIPAL and SURETY, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instruments as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this \_\_\_\_\_ day of \_\_\_\_\_

My commission expires \_\_\_\_\_

(Notary Public)

ELECTRONIC BID BOND

Electronic bid bond is allowed (box must be checked by LA if electronic bid bond is allowed)

The Principal may submit an electronic bid bond, in lieu of completing the above section of the Proposal Bid Bond Form. By providing an electronic bid bond ID code and signing below, the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the LA under the conditions of the bid bond as shown above. (If PRINCIPAL is a joint venture of two or more contractors, an electronic bid bond ID code, company/Bidder name title and date must be affixed for each contractor in the venture.)

Electronic Bid Bond ID Code (grid)

Electronic Bid Bond ID Code

(Company/Bidder Name)

(Signature and Title)

Date



**Apprenticeship or Training  
Program Certification**

**Return with Bid**

Route	<u>Various Streets</u>
County	<u>Du Page</u>
Local Agency	<u>Willowbrook</u>
Section	<u>16-00000-01-GM</u>

**All contractors are required to complete the following certification:**

For this contract proposal or for all groups in this deliver and install proposal.

For the following deliver and install groups in this material proposal:

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Illinois Department of Transportation policy, adopted in accordance with the provisions of the Illinois Highway Code, requires this contract to be awarded to the lowest responsive and responsible bidder. The award decision is subject to approval by the Department. In addition to all other responsibility factors, this contract or deliver and install proposal requires all bidders and all bidders' subcontractors to disclose participation in apprenticeship or training programs that are (1) approved by and registered with the United States Department of Labor's Bureau of Apprenticeship and Training, and (2) applicable to the work of the above indicated proposals or groups. Therefore, all bidders are required to complete the following certification:

- I. Except as provided in paragraph IV below, the undersigned bidder certifies that it is a participant, either as an individual or as part of a group program, in an approved apprenticeship or training program applicable to each type of work or craft that the bidder will perform with its own employees.
- II. The undersigned bidder further certifies for work to be performed by subcontract that each of its subcontractors submitted for approval either (A) is, at the time of such bid, participating in an approved, applicable apprenticeship or training program; or (B) will, prior to commencement of performance of work pursuant to this contract, establish participation in an approved apprenticeship or training program applicable to the work of the subcontract.
- III. The undersigned bidder, by inclusion in the list in the space below, certifies the official name of each program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the bidder is a participant and that will be performed with the bidder's employees. Types of work or craft that will be subcontracted shall be included and listed as subcontract work. The list shall also indicate any type of work or craft job category for which there is no applicable apprenticeship or training program available.

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IV. Except for any work identified above, any bidder or subcontractor that shall perform all or part of the work of the contract or deliver and install proposal solely by individual owners, partners or members and not by employees to whom the payment of prevailing rates of wages would be required, check the following box, and identify the owner/operator workforce and positions of ownership.

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The requirements of this certification and disclosure are a material part of the contract, and the contractor shall require this certification provision to be included in all approved subcontracts. The bidder is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project is accounted for and listed. The Department at any time before or after award may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors. In order to fulfill the participation requirement, it shall not be necessary that any applicable program sponsor be currently taking or that it will take applications for apprenticeship, training or employment during the performance of the work of this contract or deliver and install proposal.

Bidder: \_\_\_\_\_

By: \_\_\_\_\_

Address: \_\_\_\_\_

(Signature)  
Title: \_\_\_\_\_

The work involved in maintaining the existing pavement will not be paid for separately at the contract unit prices for the various items of work involved, unless otherwise specified elsewhere in these Special Provisions. Traffic control and protection will be paid for as stated in the contract. No construction activity shall begin until all proper signs and barricades have been installed. There shall be no equipment or material storage on the pavement, temporary or otherwise. All driveways must have access each night except during driveway apron removal and replacement process. In the event a driveway is not open at the end of the workday, \$500 per incident will be deducted from monies due to the contractor.

The CONTRACTOR shall not prime coat any streets overnight. In the event the CONTRACTOR does prime coat a street the night before paving, a \$1,000.00 per incident will be deducted from monies due to the CONTRACTOR.

No garbage shall be disposed of by the CONTRACTOR on the project site. In the event the CONTRACTOR does dispose of garbage on the project site a \$500.00 per incident will be deducted from monies due to the CONTRACTOR.

If items of work have not been provided for in the contract, or otherwise specified for payment, such items, including the accompanying traffic control and protection, and detour route required by the VILLAGE, will be paid for in accordance with Article 109.04 of the STANDARD SPECIFICATIONS.

In the event the CONTRACTOR leaves the aggregate base course exposed commencing on the third night following the start of pavement removal, a \$5,000 per night per street will be deducted from monies due to the CONTRACTOR. A time extension may be granted by the engineer for unforeseen weather conditions that occur prior to the start of liquidated damages.

#### **MISCELLANEOUS SAW-CUTTING**

Whenever the new work will meet existing conditions other than lawn areas, regardless of whether it is asphalt or concrete, the existing adjacent pavement or curb shall be saw-cut to provide a neat joint. The saw-cut shall be in a straight line sufficiently deep so that it renders a smooth vertical face to match to. All saw cutting shall be considered incidental to the cost to the adjacent items of new work.

If the contractor is not careful or does not saw deep enough and the cut line breaks out or chips to an imperfect edge, then the existing side must be re-cut square and done over until it is correct. Any additional quantity of new work required as a result of additional removal caused by improper saw cutting will not be paid for.

#### **DISPOSAL OF DEBRIS AND EXCAVATED OR REMOVED MATERIALS**

The Contractor shall be responsible for removal and disposal of all waste material, asphalt, concrete, stone, dirt, or debris generated in the course of the work.

The contractor shall load the removed pieces of curb and gutter, sidewalk, driveway and street pavements, etc., directly onto trucks, haul it away, and dispose of it. The temporary storing of excavated materials on the parkways, and re-handling them later for disposal will not be allowed due to additional damage caused to tree root systems, parkways, existing equipment, and

Since Arlene Place, 75th Place, Eleanor Place, Virginia Court, and Midway Drive (Alternate Bid Only) will be resurfaced with 1.5" Surface Course Overlay, the Class D Patch, 6" (Special) shall be the following only :

The existing pavement including the base and Hot-Mix Asphalt surface shall be saw cut and removed and replaced with **six (6") inches of Hot-Mix Asphalt Binder Course, IL-19 mm**, as specified in Article 406. The surface of the patch be flush with the surface of the existing Hot-Mix Asphalt surface prior to the 1.5" Surface Course Overlay.

All holes, soft places and other defects in the subbase or subgrade shall be corrected by the Contractor by removing the unsuitable material, adding more **Hot-Mix Asphalt Mixture** as specified herein in conformance with Article 406.

If the contractor is not careful or does not saw deep enough and the cut line breaks out or chips to an imperfect edge, then the existing side must be re-cut square and done over until it is correct. Any additional quantity of new work required as a result of additional removal caused by improper saw cutting will not be paid for.

**Method of Measurement and Basis of Payment.** This work will be paid for at the contract unit price per SQUARE YARD (SY) for **CLASS D PATCH, 6" (SPECIAL)** which price shall include the removal of the existing pavement base, Hot-Mix Asphalt Surface and sub-grade as directed by the engineer, the compaction of the existing subgrade, and placement and compaction of the specified Hot-Mix Asphalt mixture up to the surface of the existing Hot-Mix Asphalt surface.

<b>6" Patching Locations* (Streets not to be Resurfaced)</b>
79th Street
Brookbank Road
Bentwood Lane
Raleigh Road
Wesley Road
Tennessee Ave.
79th Street

**\* The Village of Willowbrook reserves the right to increase or decrease the quantity at its discretion**

## HOT-MIX ASPHALT MIXTURE REQUIREMENTS

The following Hot-Mix Asphalt mixes shall be used in this maintenance:

MIXTURE TYPE	AIR VOIDS
Hot-Mix Asphalt Surface Course, Mix "D", N50 (IL-9.5mm)	4% @ 50 GYR
Hot-Mix Asphalt Binder Course, IL-19.0, N50 (IL-19.0mm)	4% @ 50 GYR

**THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SQYD/IN**

**THE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS**

### FRAMES AND LIDS TO BE ADJUSTED

**Description:** This work shall consist of adjusting the frames, with grates or lids, of existing drainage and utility structures. These items of work shall be performed as directed by the Engineer in conformance with applicable provisions of Sections 602 and 603 of the Standard Specifications for Road and Bridge Construction published by the Illinois Department of Transportation adopted April 1, 2016 with the following exception:

**Article 603.05 Replacement of Existing Flexible Pavement.** After the castings have been adjusted, the surrounding space shall be filled with Class PP-1 concrete ONLY (See attached IDOT Detail BD-8)

**Basis of Payment.** This work will be paid for at the contract unit each price per EACH (EA) for **FRAMES AND LIDS TO BE ADJUSTED.**

**THERMOPLASTIC PAVEMENT MARKINGS**

The following areas will be striped with Thermoplastic Pavement Markings at locations as directed by the Engineer:

Location	Line 24" White Stop Bar (LF) Item No. 78000650
<b>75<sup>th</sup> Place</b>	
At Eleanor Pl	13
At Arlene Pl	13
<b>Arlene Place</b>	
At Eleanor Pl	13
<b>Eleanor Place</b>	
Northbound Lane Approaching Midway at Stop Sign	14
Southbound Lane Approaching Midway at Stop Sign	14
<b>Virginia Court</b>	
At Eleanor Pl	13
Northbound Lane Approaching Midway at Stop Sign	13
Southbound Lane Approaching Midway at Stop Sign	13
<b>Midway Drive (Alternate Bid ONLY)</b>	
Eastbound Lane At Eleanor Pl	14
At Clarendon Hills Rd	14
<b>24" Line - White Stop Bar Total</b>	<b>134</b>

Location	Line 4" White (LF) Item No. 78000200
Midway Dr – Clarendon Hills Rd to Eleanor Pl (Alternate Bid ONLY)	4600
Eleanor Pl – Midway Dr to 79 <sup>th</sup> St	2500
<b>4" Line – White Total</b>	<b>7100</b>

**CRACK FILLING (SPECIAL)**

**Description:** This work will consist of the cleaning of cracks via compressed air, the routing of cracks, filling of cracks and dusting the sealant with fine sand, Portland cement, or mineral filler.

The routing of the cracks shall be one half inch (1/2").

**Specifications:** All materials, equipment, construction requirements, method of measurement and basis of payment will comply with Article 451 and Article 1050.02 of the Standard Specifications for Road and Bridge Construction published by the Illinois Department of Transportation adopted April 1, 2016.

State of Illinois  
Department of Transportation  
Bureau of Local Roads and Streets

SPECIAL PROVISION  
FOR  
INSURANCE

Effective: February 1, 2007  
Revised: August 1, 2007

All references to Sections or Articles in this specification shall be construed to mean specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

The Contractor shall name the following entities as additional insured under the Contractor's general liability insurance policy in accordance with Article 107.27:

Village of Willowbrook

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Christopher B. Burke Engineering LTD

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County of Du Page

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The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.

Dimension	Requirement
Inside Opening	Outside dimensions of casting + 1 in. (25 mm)
Thickness at inside edge	Height of casting $\pm$ 1/4 in. (6 mm)
Thickness at outside edge	1/4 in. (6 mm) max.
Width, measured from inside opening to outside edge	8 1/2 in. (215 mm) min

Placement shall be according to the manufacturer's specifications.

Temporary ramps for castings shall remain in place until surfacing operations are undertaken within the immediate area of the structure. Prior to placing the surface course, the temporary ramp shall be removed. Excess material shall be disposed of according to Article 202.03."

**FRICTION AGGREGATE (D-1)**

Effective: January 1, 2011  
 Revised: April 29, 2016

Revise Article 1004.03(a) of the Standard Specifications to read:

**"1004.03 Coarse Aggregate for Hot-Mix Asphalt (HMA).** The aggregate shall be according to Article 1004.01 and the following.

(a) Description. The coarse aggregate for HMA shall be according to the following table.

Use	Mixture	Aggregates Allowed
Class A	Seal or Cover	<u>Allowed Alone or in Combination</u> <sup>5/</sup> Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete
HMA Low ESAL	Stabilized Subbase or Shoulders	<u>Allowed Alone or in Combination</u> <sup>5/</sup> Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>1/</sup> Crushed Concrete
HMA High ESAL Low ESAL	Binder IL-19.0 or IL-19.0L  SMA Binder	<u>Allowed Alone or in Combination</u> <sup>5/ 6/</sup> Crushed Gravel Carbonate Crushed Stone <sup>2/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete <sup>3/</sup>

Use	Mixture	Aggregates Allowed								
HMA High ESAL Low ESAL	C Surface and Leveling Binder IL-9.5 or IL-9.5L  SMA Ndesign 50 Surface	<u>Allowed Alone or in Combination</u> <sup>5/</sup> Crushed Gravel Carbonate Crushed Stone <sup>2/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>4/</sup> Crushed Concrete <sup>3/</sup>								
HMA High ESAL	D Surface and Leveling Binder IL-9.5  SMA Ndesign 50 Surface	<u>Allowed Alone or in Combination</u> <sup>5/</sup> Crushed Gravel Carbonate Crushed Stone (other than Limestone) <sup>2/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>4/</sup> Crushed Concrete <sup>3/</sup>  <u>Other Combinations Allowed:</u> <table border="1" data-bbox="699 1079 1308 1465"> <tr> <td data-bbox="699 1079 1008 1184"><i>Up to...</i></td> <td data-bbox="1008 1079 1308 1184"><i>With...</i></td> </tr> <tr> <td data-bbox="699 1184 1008 1234">25% Limestone</td> <td data-bbox="1008 1184 1308 1234">Dolomite</td> </tr> <tr> <td data-bbox="699 1234 1008 1352">50% Limestone</td> <td data-bbox="1008 1234 1308 1352">Any Mixture D aggregate other than Dolomite</td> </tr> <tr> <td data-bbox="699 1352 1008 1465">75% Limestone</td> <td data-bbox="1008 1352 1308 1465">Crushed Slag (ACBF) or Crushed Sandstone</td> </tr> </table>	<i>Up to...</i>	<i>With...</i>	25% Limestone	Dolomite	50% Limestone	Any Mixture D aggregate other than Dolomite	75% Limestone	Crushed Slag (ACBF) or Crushed Sandstone
<i>Up to...</i>	<i>With...</i>									
25% Limestone	Dolomite									
50% Limestone	Any Mixture D aggregate other than Dolomite									
75% Limestone	Crushed Slag (ACBF) or Crushed Sandstone									
HMA High ESAL	E Surface IL-9.5  SMA Ndesign 80 Surface	<u>Allowed Alone or in Combination</u> <sup>5/ 6/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag  No Limestone.  <u>Other Combinations Allowed:</u> <table border="1" data-bbox="699 1801 1308 1904"> <tr> <td data-bbox="699 1801 992 1904"><i>Up to...</i></td> <td data-bbox="992 1801 1308 1904"><i>With...</i></td> </tr> </table>	<i>Up to...</i>	<i>With...</i>						
<i>Up to...</i>	<i>With...</i>									

## GROUND TIRE RUBBER (GTR) MODIFIED ASPHALT BINDER (D-1)

Effective: June 26, 2006

Revised: April 1, 2016

Add the following to the end of article 1032.05 of the Standard Specifications:

“(c) Ground Tire Rubber (GTR) Modified Asphalt Binder. A quantity of 10.0 to 14.0 percent GTR (Note 1) shall be blended by dry unit weight with a PG 64-28 to make a GTR 70-28 or a PG 58-28 to make a GTR 64-28. The base PG 64-28 and PG 58-28 asphalt binders shall meet the requirements of Article 1032.05(a). Compatible polymers may be added during production. The GTR modified asphalt binder shall meet the requirements of the following table.

Test	Asphalt Grade GTR 70-28	Asphalt Grade GTR 64-28
Flash Point (C.O.C.), AASHTO T 48, °F (°C), min.	450 (232)	450 (232)
Rotational Viscosity, AASHTO T 316 @ 275 °F (135 °C), Poises, Pa-s, max.	30 (3)	30 (3)
Softening Point, AASHTO T 53, °F (°C), min.	135 (57)	130 (54)
Elastic Recovery, ASTM D 6084, Procedure A (sieve waived) @ 77 °F, (25 °C), aged, ss, 100 mm elongation, 5 cm/min., cut immediately, %, min.	65	65

Note 1. GTR shall be produced from processing automobile and/or light truck tires by the ambient grinding method. GTR shall not exceed 1/16 in. (2 mm) in any dimension and shall contain no free metal particles or other materials. A mineral powder (such as talc) meeting the requirements of AASHTO M 17 may be added, up to a maximum of four percent by weight of GTR to reduce sticking and caking of the GTR particles. When tested in accordance with Illinois modified AASHTO T 27, a 50 g sample of the GTR shall conform to the following gradation requirements:

Sieve Size	Percent Passing
No. 16 (1.18 mm)	100
No. 30 (600 µm)	95 ± 5
No. 50 (300 µm)	> 20

Add the following to the end of Note 1. of article 1030.03 of the Standard Specifications:

“A dedicated storage tank for the Ground Tire Rubber (GTR) modified asphalt binder shall be provided. This tank must be capable of providing continuous mechanical mixing throughout by continuous agitation and recirculation of the asphalt binder to provide a

uniform mixture. The tank shall be heated and capable of maintaining the temperature of the asphalt binder at 300 °F to 350 °F (149 °C to 177 °C). The asphalt binder metering systems of dryer drum plants shall be calibrated with the actual GTR modified asphalt binder material with an accuracy of  $\pm 0.40$  percent."

Revise 1030.02(c) of the Standard Specifications to read:

"(c) RAP Materials (Note 5) .....1031"

Add the following note to 1030.02 of the Standard Specifications:

Note 5. When using reclaimed asphalt pavement and/or reclaimed asphalt shingles, the maximum asphalt binder replacement percentage shall be according to the most recent special provision for recycled materials.

## HMA MIXTURE DESIGN REQUIREMENTS (D-1)

Effective: January 1, 2013

Revised: April 1, 2016

### 1) Design Composition and Volumetric Requirements

Revise the table in Article 406.06(d) of the Standard Specifications to read:

"MINIMUM COMPACTED LIFT THICKNESS	
Mixture Composition	Thickness, in. (mm)
IL-4.75	3/4 (19)
SMA-9.5, IL-9.5, IL-9.5L	1 1/2 (38)
SMA-12.5	2 (50)
IL-19.0, IL-19.0L	2 1/4 (57)"

Revise the table in Article 1004.03(c) of the Standard Specifications to read:

"Use	Size/Application	Gradation No.
Class A-1, 2, & 3	3/8 in. (10 mm) Seal	CA 16
Class A-1	1/2 in. (13 mm) Seal	CA 15
Class A-2 & 3	Cover	CA 14
HMA High ESAL	IL-19.0 IL-9.5	CA 11 <sup>1/</sup> CA 16, CA 13 <sup>3/</sup>
HMA Low ESAL	IL-19.0L IL-9.5L Stabilized Subbase or Shoulders	CA 11 <sup>1/</sup> CA 16
SMA <sup>2/</sup>	1/2 in. (12.5mm) Binder & Surface IL 9.5 Surface	CA13 <sup>3/</sup> , CA14 or CA16  CA16, CA 13 <sup>3/</sup>

1/ CA 16 or CA 13 may be blended with the gradations listed.

2/ The coarse aggregates used shall be capable of being combined with stone sand, slag sand, or steel slag sand meeting the FA/FM 20 gradation and mineral filler to meet the approved mix design and the mix requirements noted herein.

3/ CA 13 shall be 100 percent passing the 1/2 in. (12.5mm) sieve.

Revise Article 1004.03(e) of the Supplemental Specifications to read:

"(e) Absorption. For SMA the coarse aggregate shall also have water absorption ≤ 2.0 percent."

Revise the last paragraph of Article 1102.01 (a) (5) of the Standard Specifications to read:

“IL-4.75 and Stone Matrix Asphalt (SMA) mixtures which contain aggregate having absorptions greater than or equal to 2.0 percent, or which contain steel slag sand, shall have minimum surge bin storage plus haul time of 1.5 hours.”

Revise the nomenclature table in Article 1030.01 of the Standard Specifications to read:

“High ESAL	IL-19.0 binder; IL-9.5 surface; IL-4.75; SMA-12.5, SMA-9.5
Low ESAL	IL-19.0L binder; IL-9.5L surface; Stabilized Subbase (HMA) <sup>1/</sup> ; HMA Shoulders <sup>2/</sup>

1/ Uses 19.0L binder mix.

2/ Uses 19.0L for lower lifts and 9.5L for surface lift.”

Revise Article 1030.02 of the Standard Specifications and Supplemental Specifications to read:

“**1030.02 Materials.** Materials shall be according to the following.

Item .....	Article/Section
(a) Coarse Aggregate .....	1004.03
(b) Fine Aggregate .....	1003.03
(c) RAP Material .....	1031
(d) Mineral Filler .....	1011
(e) Hydrated Lime .....	1012.01
(f) Slaked Quicklime (Note 1)	
(g) Performance Graded Asphalt Binder (Note 2) .....	1032
(h) Fibers (Note 3)	
(i) Warm Mix Asphalt (WMA) Technologies (Note 4)	

Note 1. Slaked quicklime shall be according to ASTM C 5.

Note 2. The asphalt binder shall be an SBS PG 76-28 when the SMA is used on a full-depth asphalt pavement and SBS PG 76-22 when used as an overlay, except where modified herein. The asphalt binder shall be an Elvaloy or SBS PG 76-22 for IL-4.75, except where modified herein. The elastic recovery shall be a minimum of 80.

Note 3. A stabilizing additive such as cellulose or mineral fiber shall be added to the SMA mixture according to Illinois Modified AASHTO M 325. The stabilizing additive shall meet the Fiber Quality Requirements listed in Illinois Modified AASHTO M 325. Prior to approval and use of fibers, the Contractor shall submit a notarized certification by the producer of these materials stating they meet these requirements. Reclaimed Asphalt Shingles (RAS) may be used in Stone Matrix Asphalt (SMA) mixtures designed with an SBA polymer modifier as a fiber additive if the mix design with RAS included meets AASHTO T305 requirements. The RAS shall be from a certified source that

produces either Type I or Type 2. Material shall meet requirements noted herein and the actual dosage rate will be determined by the Engineer.

Note 4. Warm mix additives or foaming processes shall be selected from the current Bureau of Materials and Physical Research Approved List, "Warm Mix Asphalt Technologies".

Revise Article 1030.04(a)(1) of the Standard Specifications and the Supplemental Specifications to read:

"(1) High ESAL Mixtures. The Job Mix Formula (JMF) shall fall within the following limits.

High ESAL, MIXTURE COMPOSITION (% PASSING) <sup>1/</sup>										
Sieve Size	IL-19.0 mm		SMA <sup>4/</sup> IL-12.5 mm		SMA <sup>4/</sup> IL-9.5 mm		IL-9.5 mm		IL-4.75 mm	
	min	max	min	max	min	max	min	max	min	max
1 1/2 in. (37.5 mm)										
1 in. (25 mm)		100								
3/4 in. (19 mm)	90	100		100						
1/2 in. (12.5 mm)	75	89	80	100		100		100		100
3/8 in. (9.5 mm)				65	90	100	90	100		100
#4 (4.75 mm)	40	60	20	30	36	50	34	69	90	100
#8 (2.36 mm)	20	42	16	24 <sup>5/</sup>	16	32 <sup>5/</sup>	34 <sup>8/</sup>	52 <sup>2/</sup>	70	90
#16 (1.18 mm)	15	30					10	32	50	65
#30 (600 μm)			12	16	12	18				
#50 (300 μm)	6	15					4	15	15	30
#100 (150 μm)	4	9					3	10	10	18
#200 (75 μm)	3	6	7.0	9.0 <sup>3/</sup>	7.5	9.5 <sup>3/</sup>	4	6	7	9 <sup>3/</sup>
Ratio Dust/Asphalt Binder		1.0		1.5		1.5		1.0		1.0

- 1/ Based on percent of total aggregate weight.
- 2/ The mixture composition shall not exceed 44 percent passing the #8 (2.36 mm) sieve for surface courses with N<sub>design</sub> = 90.
- 3/ Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer.
- 4/ The maximum percent passing the #635 (20 μm) sieve shall be ≤ 3 percent.

- 5/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted above the percentage stated on the table.
- 6/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted below 34 percent.

Revise Article 1030.04(b)(1) of the Standard Specifications to read:

"(1) High ESAL Mixtures. The target value for the air voids of the HMA shall be 4.0 percent and for IL-4.75 it shall be 3.5 percent at the design number of gyrations. The VMA and VFA of the HMA design shall be based on the nominal maximum size of the aggregate in the mix, and shall conform to the following requirements.

VOLUMETRIC REQUIREMENTS High ESAL				
Ndesign	Voids in the Mineral Aggregate (VMA), % minimum			Voids Filled with Asphalt Binder (VFA), %
	IL-19.0	IL-9.5	IL-4.75 <sup>1/</sup>	
50	13.5	15.0	18.5	65 – 78 <sup>2/</sup>
70				
90				

1/ Maximum Draindown for IL-4.75 shall be 0.3 percent

2/ VFA for IL-4.75 shall be 72-85 percent"

Replace Article 1030.04(b)(3) of the Standard Specifications with the following:

"(3) SMA Mixtures.

Volumetric Requirements SMA <sup>1/</sup>			
Ndesign	Design Air Voids Target %	Voids in the Mineral Aggregate (VMA), % min.	Voids Filled with Asphalt (VFA), %
80 <sup>4/</sup>	3.5	17.0 <sup>2/</sup>	75 - 83
		16.0 <sup>3/</sup>	

1/ Maximum draindown shall be 0.3 percent. The draindown shall be determined at the JMF asphalt binder content at the mixing temperature plus 30 °F.

2/ Applies when specific gravity of coarse aggregate is ≥ 2.760.

- 3/ Applies when specific gravity of coarse aggregate is < 2.760.
- 4/ Blending of different types of aggregate will not be permitted.  
For surface course, the coarse aggregate can be crushed steel slag, crystalline crushed stone or crushed sandstone. For binder course, coarse aggregate shall be crushed stone (dolomite), crushed gravel, crystalline crushed stone, or crushed sandstone.

Add to the end of Article 1030.05 (d) (2) a. of the Standard Specifications:

"During production, the Contractor shall test SMA mixtures for draindown according to AASHTO T305 at a frequency of 1 per day of production."

Delete last sentence of the second paragraph of Article 1102.01(a) (4) b. 2.

Add to the end of Article 1102.01 (a) (4) b. 2.:

"As an option, collected dust (baghouse) may be used in lieu of manufactured mineral filler according to the following:

- (a.) Sufficient collected dust (baghouse) is available for production of the SMA mix for the entire project.
- (b.) A mix design was prepared based on collected dust (baghouse).

## **2) Design Verification and Production**

Revise Article 1030.04 (d) of the Standard Specifications to read:

"(d) Verification Testing. High ESAL, IL-4.75, and SMA mix designs submitted for verification will be tested to ensure that the resulting mix designs will pass the required criteria for the Hamburg Wheel Test (IL mod AASHTO T-324) and the Tensile Strength Test (IL mod AASHTO T-283). The Department will perform a verification test on gyratory specimens compacted by the Contractor. If the mix fails the Department's verification test, the Contractor shall make the necessary changes to the mix and resubmit compacted specimens to the Department for verification. If the mix fails again, the mix design will be rejected.

All new and renewal mix designs will be required to be tested, prior to submittal for Department verification and shall meet the following requirements:

- (1) Hamburg Wheel Test criteria. The maximum allowable rut depth shall be 0.5 in. (12.5 mm). The minimum number of wheel passes at the 0.5 in. (12.5 mm) rut depth criteria shall be based on the high temperature binder grade of the mix as specified in the mix requirements table of the plans.

### Illinois Modified AASHTO T 324 Requirements <sup>1/</sup>

Asphalt Binder Grade	# Repetitions	Max Rut Depth (mm)
PG 70 -XX (or higher)	20,000	12.5
PG 64 -XX (or lower)	10,000	12.5

- 1/ When produced at temperatures of  $275 \pm 5$  °F ( $135 \pm 3$  °C) or less, loose Warm Mix Asphalt shall be oven aged at  $270 \pm 5$  °F ( $132 \pm 3$  °C) for two hours prior to gyratory compaction of Hamburg Wheel specimens.

Note: For SMA Designs (N-80) the maximum rut depth is 6.0 mm at 20,000 repetitions.

For IL 4.75mm Designs (N-50) the maximum rut depth is 9.0mm at 15,000 repetitions.

- (2) Tensile Strength Criteria. The minimum allowable conditioned tensile strength shall be 60 psi (415 kPa) for non-polymer modified performance graded (PG) asphalt binder and 80 psi (550 kPa) for polymer modified PG asphalt binder. The maximum allowable unconditioned tensile strength shall be 200 psi (1380 kPa)."

Production Testing. Revise first paragraph of Article 1030.06(a) of the Standard Specifications to read:

- "(a) High ESAL, IL-4.75, WMA, and SMA Mixtures. For each contract, a 300 ton (275 metric tons) test strip, except for SMA mixtures it will be 400 ton (363 metric ton), will be required at the beginning of HMA production for each mixture with a quantity of 3000 tons (2750 metric tons) or more according to the Manual of Test Procedures for Materials "Hot Mix Asphalt Test Strip Procedures".

Add the following after the sixth paragraph in Article 1030.06 (a) of the Standard Specifications:

"The Hamburg Wheel test shall also be conducted on all HMA mixtures from a sample taken within the first 500 tons (450 metric tons) on the first day of production or during start up with a split reserved for the Department. The mix sample shall be tested according to the Illinois Modified AASHTO T 324 and shall meet the requirements specified herein. Mix production shall not exceed 1500 tons (1350 metric tons) or one day's production, whichever comes first, until the testing is completed and the mixture is found to be in conformance. The requirement to cease mix production may be waived if the plant produced mixture demonstrates conformance prior to start of mix production for a contract.

If the mixture fails to meet the Hamburg Wheel criteria, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria"

Method of Measurement:

Add the following after the fourth paragraph of Article 406.13 (b):

"The plan quantities of SMA mixtures shall be adjusted using the actual approved binder and surface Mix Design's Gmb."

Basis of Payment.

Replace the fourth paragraph of Article 406.14 of the Standard Specifications with the following:

"Stone matrix asphalt will be paid for at the contract unit price per ton (metric ton) for POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, of the mixture composition and Ndesign specified; and POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, STONE MATRIX ASPHALT, of the mixture composition and Ndesign specified."

## **RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (D-1)**

Effective: November 1, 2012

Revise: April 2, 2016

Revise Section 1031 of the Standard Specifications to read:

### **"SECTION 1031. RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES**

**1031.01 Description.** Reclaimed asphalt pavement and reclaimed asphalt shingles shall be according to the following.

- (a) Reclaimed Asphalt Pavement (RAP). RAP is the material resulting from cold milling or crushing an existing hot-mix asphalt (HMA) pavement. RAP will be considered processed FRAP after completion of both crushing and screening to size. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.
- (b) Reclaimed Asphalt Shingles (RAS). Reclaimed asphalt shingles (RAS). RAS is from the processing and grinding of preconsumer or post-consumer shingles. RAS shall be a clean and uniform material with a maximum of 0.5 percent unacceptable material, as defined in Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Sources", by weight of RAS. All RAS used shall come from a Bureau of Materials and Physical Research approved processing facility where it shall be ground and processed to 100 percent passing the 3/8 in. (9.5 mm) sieve and 90 percent passing the #4 (4.75 mm) sieve. RAS shall meet the testing requirements specified herein. In addition, RAS shall meet the following Type 1 or Type 2 requirements.
  - (1) Type 1. Type 1 RAS shall be processed, preconsumer asphalt shingles salvaged from the manufacture of residential asphalt roofing shingles.
  - (2) Type 2. Type 2 RAS shall be processed post-consumer shingles only, salvaged from residential, or four unit or less dwellings not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP).

**1031.02 Stockpiles.** RAP and RAS stockpiles shall be according to the following.

- (a) RAP Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. Additional processed RAP (FRAP) shall be stockpiled in a separate working pile, as designated in the QC Plan, and only added to the sealed stockpile when test results for the working pile are complete and are found to meet tolerances specified herein for the original sealed FRAP stockpile. Stockpiles shall be sufficiently separated to prevent intermingling at the base. All stockpiles (including

unprocessed RAP and FRAP) shall be identified by signs indicating the type as listed below (i.e. "Non- Quality, FRAP -#4 or Type 2 RAS", etc...).

- (1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. All FRAP shall be processed prior to testing and sized into fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP in the coarse fraction shall pass the maximum sieve size specified for the mix the FRAP will be used in.
- (2) Restricted FRAP (B quality) stockpiles shall consist of RAP from Class I, Superpave (High ESAL), or HMA (High ESAL). If approved by the Engineer, the aggregate from a maximum 3.0 in. (75 mm) single combined pass of surface/binder milling will be classified as B quality. All millings from this application will be processed into FRAP as described previously.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed (FRAP) prior to testing. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (4) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from HMA shoulders, bituminous stabilized subbases or Superpave (Low ESAL)/HMA (Low ESAL) IL-19.0L binder mixture. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (5) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

RAP or FRAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, plant cleanout etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.

- (b) RAS Stockpiles. Type 1 and Type 2 RAS shall be stockpiled separately and shall be sufficiently separated to prevent intermingling at the base. Each stockpile shall be signed indicating what type of RAS is present.

However, a RAS source may submit a written request to the Department for approval to blend mechanically a specified ratio of Type 1 RAS with Type 2 RAS. The source will not be permitted to change the ratio of the blend without the Department prior written approval. The Engineer's written approval will be required, to mechanically blend RAS with any fine aggregate produced under the AGCS, up to an equal weight of RAS, to improve workability. The fine aggregate shall be "B Quality" or better from an approved Aggregate Gradation Control System source. The fine aggregate shall be one that is approved for use in the HMA mixture and accounted for in the mix design and during HMA production.

Records identifying the shingle processing facility supplying the RAS, RAS type, and lot number shall be maintained by project contract number and kept for a minimum of three years.

**1031.03 Testing.** FRAP and RAS testing shall be according to the following.

- (a) FRAP Testing. When used in HMA, the FRAP shall be sampled and tested either during processing or after stockpiling. It shall also be sampled during HMA production.
  - (1) During Stockpiling. For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).
  - (2) Incoming Material. For testing as incoming material, washed extraction samples shall be run at a minimum frequency of one sample per 2000 tons (1800 metric tons) or once per week, whichever comes first.
  - (3) After Stockpiling. For testing after stockpiling, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP/FRAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

Before extraction, each field sample of FRAP, shall be split to obtain two samples of test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to Department procedure. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

- (b) RAS Testing. RAS shall be sampled and tested during stockpiling according to Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Sources". The Contractor shall also sample as incoming material at the HMA plant.

- (1) During Stockpiling. Washed extraction and testing for unacceptable materials shall be run at the minimum frequency of one sample per 200 tons (180 metric tons) for the first 1000 tons (900 metric tons) and one sample per 1000 tons (900 metric tons) thereafter. A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). Once a  $\leq 1000$  ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS shall be in a separate working pile as designated in the Quality Control plan and only added to the sealed stockpile when the test results of the working pile are complete and are found to meet the tolerances specified herein for the original sealed RAS stockpile.
- (2) Incoming Material. For testing as incoming material at the HMA plant, washed extraction shall be run at the minimum frequency of one sample per 250 tons (227 metric tons). A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). The incoming material test results shall meet the tolerances specified herein.

The Contractor shall obtain and make available all test results from start of the initial stockpile sampled and tested at the shingle processing facility in accordance with the facility's QC Plan.

Before extraction, each field sample shall be split to obtain two samples of test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to Department procedures. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

**1031.04 Evaluation of Tests.** Evaluation of test results shall be according to the following.

- (a) Evaluation of FRAP Test Results. All test results shall be compiled to include asphalt binder content, gradation and, when applicable (for slag),  $G_{mm}$ . A five test average of results from the original pile will be used in the mix designs. Individual extraction test results run thereafter, shall be compared to the average used for the mix design, and will be accepted if within the tolerances listed below.

Parameter	FRAP
No. 4 (4.75 mm)	$\pm 6 \%$
No. 8 (2.36 mm)	$\pm 5 \%$
No. 30 (600 $\mu\text{m}$ )	$\pm 5 \%$
No. 200 (75 $\mu\text{m}$ )	$\pm 2.0 \%$
Asphalt Binder	$\pm 0.3 \%$
$G_{mm}$	$\pm 0.03$ <sup>1/</sup>

- 1/ For stockpile with slag or steel slag present as determined in the current Manual of Test Procedures Appendix B 21, "Determination of Reclaimed Asphalt Pavement Aggregate Bulk Specific Gravity".

If any individual sieve and/or asphalt binder content tests are out of the above tolerances when compared to the average used for the mix design, the FRAP stockpile shall not be used in Hot-Mix Asphalt unless the FRAP representing those tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

The Contractor shall maintain a representative moving average of five tests to be used for Hot-Mix Asphalt production.

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the ITP, "Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)" or Illinois Modified AASHTO T-164-11, Test Method A.

- (b) Evaluation of RAS Test Results. All of the test results, with the exception of percent unacceptable materials, shall be compiled and averaged for asphalt binder content and gradation. A five test average of results from the original pile will be used in the mix designs. Individual test results run thereafter, when compared to the average used for the mix design, will be accepted if within the tolerances listed below.

Parameter	RAS
No. 8 (2.36 mm)	± 5 %
No. 16 (1.18 mm)	± 5 %
No. 30 (600 µm)	± 4 %
No. 200 (75 µm)	± 2.5 %
Asphalt Binder Content	± 2.0 %

If any individual sieve and/or asphalt binder content tests are out of the above tolerances when compared to the average used for the mix design, the RAS shall not be used in Hot-Mix Asphalt unless the RAS representing those tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

- (c) Quality Assurance by the Engineer. The Engineer may witness the sampling and splitting conduct assurance tests on split samples taken by the Contractor for quality control testing a minimum of once a month.

The overall testing frequency will be performed over the entire range of Contractor samples for asphalt binder content and gradation. The Engineer may select any or all split samples for assurance testing. The test results will be made available to the Contractor as soon as they become available.

The Engineer will notify the Contractor of observed deficiencies.

Differences between the Contractor's and the Engineer's split sample test results will be considered acceptable if within the following limits.

Test Parameter	Acceptable Limits of Precision	
	FRAP	RAS
% Passing: <sup>1/</sup>		
1/2 in.	5.0%	
No. 4	5.0%	
No. 8	3.0%	4.0%
No. 30	2.0%	3.0%
No. 200	2.2%	2.5%
Asphalt Binder Content	0.3%	1.0%
G <sub>mm</sub>	0.030	

1/ Based on washed extraction.

In the event comparisons are outside the above acceptable limits of precision, the Engineer will immediately investigate.

- (d) Acceptance by the Engineer. Acceptable of the material will be based on the validation of the Contractor's quality control by the assurance process.

**1031.05 Quality Designation of Aggregate in RAP and FRAP.**

- (a) RAP. The aggregate quality of the RAP for homogeneous, conglomerate, and conglomerate "D" quality stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.

- (1) RAP from Class I, Superpave/HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.
- (2) RAP from Superpave/HMA (Low ESAL) IL-19.0L binder mixture is designated as Class D quality coarse aggregate.
- (3) RAP from Class I, Superpave/HMA (High ESAL) binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate.
- (4) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.

- (b) FRAP. If the Engineer has documentation of the quality of the FRAP aggregate, the Contractor shall use the assigned quality provided by the Engineer.

If the quality is not known, the quality shall be determined as follows. Fractionated RAP stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5,000 tons (4,500 metric tons). The Contractor shall obtain a representative sample witnessed by the Engineer. The sample shall be a minimum of 50 lb (25 kg). The sample shall be extracted according to Illinois Modified AASHTO T 164 by a consultant laboratory prequalified by the Department for the specified testing. The consultant laboratory shall submit the test results along with the recovered aggregate to the District Office. The cost for this testing shall be paid by the Contractor. The District will forward the sample to the Bureau of Materials and Physical Research Aggregate Lab for MicroDeval Testing, according to ITP 327. A maximum loss of 15.0 percent will be applied for all HMA applications. The fine aggregate portion of the fractionated RAP shall not be used in any HMA mixtures that require a minimum of "B" quality aggregate or better, until the coarse aggregate fraction has been determined to be acceptable thru a MicroDeval Testing.

**1031.06 Use of FRAP and/or RAS in HMA.** The use of FRAP and/or RAS shall be the Contractor's option when constructing HMA in all contracts.

(a) FRAP. The use of FRAP in HMA shall be as follows.

- (1) Coarse Aggregate Size (after extraction). The coarse aggregate in all FRAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
- (2) Steel Slag Stockpiles. FRAP stockpiles containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in HMA (High ESAL and Low ESAL) mixtures regardless of lift or mix type.
- (3) Use in HMA Surface Mixtures (High and Low ESAL). FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall have coarse aggregate that is Class B quality or better. FRAP shall be considered equivalent to limestone for frictional considerations unless produced/screened to minus 3/8 inch.
- (4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP in which the coarse aggregate is Class C quality or better.
- (5) Use in Shoulders and Subbase. FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, Restricted FRAP, conglomerate, or conglomerate DQ.

(b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.

- (c) FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with FRAP in HMA mixtures up to a maximum of 5.0 percent by weight of the total mix.

When FRAP is used alone or FRAP is used in conjunction with RAS, the percent of virgin asphalt binder replacement (ABR) shall not exceed the amounts indicated in the table below for a given N Design.

Max Asphalt Binder Replacement for FRAP with RAS Combination

HMA Mixtures <sup>1/ 2/ 4/</sup>	Maximum % ABR		
	Binder/Leveling Binder	Surface	Polymer Modified <sup>3/</sup>
30L	50	40	30
50	40	35	30
70	40	30	30
90	40	30	30
4.75 mm N-50			40
SMA N-80			30

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the percent asphalt binder replacement shall not exceed 50 % of the total asphalt binder in the mixture.
- 2/ When the binder replacement exceeds 15 % for all mixes, except for SMA and IL-4.75, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 % binder replacement using a virgin asphalt binder grade of PG64-22 will be reduced to a PG58-28). When constructing full depth HMA and the ABR is less than 15 %, the required virgin asphalt binder grade shall be PG64-28.
- 3/ When the ABR for SMA or IL-4.75 is 15 % or less, the required virgin asphalt binder shall be SBS PG76-22 and the elastic recovery shall be a minimum of 80. When the ABR for SMA or IL-4.75 exceeds 15%, the virgin asphalt binder grade shall be SBS PG70-28 and the elastic recovery shall be a minimum of 80.
- 4/ When FRAP or RAS is used alone, the maximum percent asphalt binder replacement designated on the table shall be reduced by 10 %.

**1031.07 HMA Mix Designs.** At the Contractor's option, HMA mixtures may be constructed utilizing RAP/FRAP and/or RAS material meeting the detailed requirements specified herein.

- (a) FRAP and/or RAS. FRAP and /or RAS mix designs shall be submitted for verification. If additional FRAP or RAS stockpiles are tested and found to be within tolerance, as defined under "Evaluation of Tests" herein, and meet all requirements herein, the

additional FRAP or RAS stockpiles may be used in the original design at the percent previously verified.

- (b) RAS. Type 1 and Type 2 RAS are not interchangeable in a mix design. A RAS stone bulk specific gravity (Gsb) of 2.300 shall be used for mix design purposes.

**1031.08 HMA Production.** HMA production utilizing FRAP and/or RAS shall be as follows.

To remove or reduce agglomerated material, a scalping screen, gator, crushing unit, or comparable sizing device approved by the Engineer shall be used in the RAS and FRAP feed system to remove or reduce oversized material. If material passing the sizing device adversely affects the mix production or quality of the mix, the sizing device shall be set at a size specified by the Engineer.

If during mix production, corrective actions fail to maintain FRAP, RAS or QC/QA test results within control tolerances or the requirements listed herein the Contractor shall cease production of the mixture containing FRAP or RAS and conduct an investigation that may require a new mix design.

- (a) RAS. RAS shall be incorporated into the HMA mixture either by a separate weight depletion system or by using the RAP weigh belt. Either feed system shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes. The portion of RAS shall be controlled accurately to within  $\pm 0.5$  percent of the amount of RAS utilized. When using the weight depletion system, flow indicators or sensing devices shall be provided and interlocked with the plant controls such that the mixture production is halted when RAS flow is interrupted.
- (b) HMA Plant Requirements. HMA plants utilizing FRAP and/or RAS shall be capable of automatically recording and printing the following information.

(1) Dryer Drum Plants.

- a. Date, month, year, and time to the nearest minute for each print.
- b. HMA mix number assigned by the Department.
- c. Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
- d. Accumulated dry weight of RAS and FRAP in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
- e. Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.

- f. Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
- g. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.
- h. Aggregate RAS and FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAS and FRAP are printed in wet condition.)
- i. When producing mixtures with FRAP and/or RAS, a positive dust control system shall be utilized.
- j. Accumulated mixture tonnage.
- k. Dust Removed (accumulated to the nearest 0.1 ton (0.1 metric ton))

(2) Batch Plants.

- a. Date, month, year, and time to the nearest minute for each print.
- b. HMA mix number assigned by the Department.
- c. Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
- d. Mineral filler weight to the nearest pound (kilogram).
- f. RAS and FRAP weight to the nearest pound (kilogram).
- g. Virgin asphalt binder weight to the nearest pound (kilogram).
- h. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.

The printouts shall be maintained in a file at the plant for a minimum of one year or as directed by the Engineer and shall be made available upon request. The printing system will be inspected by the Engineer prior to production and verified at the beginning of each construction season thereafter.

**1031.09 RAP in Aggregate Surface Course and Aggregate Wedge Shoulders, Type B.**

The use of RAP or FRAP in aggregate surface course and aggregate shoulders shall be as follows.

- (a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Non-Quality" and "FRAP". The testing requirements of Article 1031.03 shall not apply. RAP used shall be according to the current Bureau of Materials and Physical

**Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".**

- (b) Gradation. The RAP material shall meet the gradation requirements for CA 6 according to Article 1004.01(c), except the requirements for the minus No. 200 (75  $\mu$ m) sieve shall not apply. The sample for the RAP material shall be air dried to constant weight prior to being tested for gradation."**

**STATUS OF UTILITIES (D-1)**

Effective: June 1, 2016

**NO CONFLICTS ANTICIPATED**

The following contact information is what was used during the preparation of the plans as provided by the owner of the facility.

Agency/Company Responsible to Resolve Conflict	Name of contact	Address	Phone	e-mail address
AT&T (Distribution)	Steve Larson	1000 Commerce Dr., Floor 1 Oak Brook, IL 60523	630-573-6464	
Comcast	Martha Gieras	688 Industrial Drive Elmhurst, IL 60126	630-600-6352	Martha_Gieras@cable.comcast.com
Commonwealth Edison	Philip A. Halliburton	4401 W. 135 <sup>th</sup> Street Crestwood, IL 60445	708-396-3425	Philip.Halliburton@ComEd.com
Nicor Gas	Karen Gustafson	1844 Ferry Road Naperville, IL 60563	630-317-1773	kgustafs@aglresources.com
Du Page County Public Works	Nicholas Kottmeyer, P.E.	DuPage County Public Works 421 N. County Farm Road Wheaton, IL 60187	630-407-6800	Nick.Kottmeyer@dupageco.org

The above represents the best information available to the Department and is included for the convenience of the bidder. The days required for conflict resolution should be taken into account in the bid as this information has also been factored into the timeline identified for the

project when setting the completion date. The applicable portions of the Standard Specifications for Road and Bridge Construction shall apply.

Estimated duration of time provided in the action column for the first conflicts identified will begin on the date of the executed contract regardless of the status of the utility relocations. The responsible agencies will be working toward resolving subsequent conflicts in conjunction with contractor activities in the number of days noted.

The estimated relocation dates must be part of the progress schedule submitted by the contractor. A utility kickoff meeting will be scheduled between the Department, the Department's contractor and the utility companies. The Department's contractor is responsible for contacting J.U.L.I.E. prior to any and all excavation work.

**TRAFFIC CONTROL PLAN**

Effective: September 30, 1985

Revised: January 1, 2007

Traffic Control shall be according to the applicable sections of the Standard Specifications, the Supplemental Specifications, the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways", any special details and Highway Standards contained in the plans, and the Special Provisions contained herein.

Special attention is called to Article 107.09 of the Standard Specifications and the following Highway Standards, Details, Quality Standard for Work Zone Traffic Control Devices, Recurring Special Provisions and Special Provisions contained herein, relating to traffic control.

The Contractor shall contact the District One Bureau of Traffic at least 72 hours in advance of beginning work.

STANDARDS: 701501

DETAILS: 701901-04, 701501-06, and TC-10

SPECIAL PROVISIONS:

**BDE SPECIAL PROVISIONS**  
For the April 22 and June 10, 2016 Lettings

The following special provisions indicated by an "x" are applicable to this contract and will be included by the Project Development and Implementation Section of the BD&E. An \* indicates a new or revised special provision for the letting.

File Name	#	Special Provision Title	Effective	Revised
80099	1	Accessible Pedestrian Signals (APS)	April 1, 2003	
* 80274	2	Aggregate Subgrade Improvement	April 1, 2012	Jan. 1, 2014
80192	3	Automated Flagger Assistance Device	Jan. 1, 2008	
80173	4	✓ Bituminous Materials Cost Adjustments	Nov. 2, 2006	July 1, 2015
80241	5	Bridge Demolition Debris	July 1, 2009	
50261	6	Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50481	7	Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50491	8	Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50531	9	Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
80360	10	✓ Coarse Aggregate Quality	July 1, 2015	
80198	11	Completion Date (via calendar days)	April 1, 2008	
80199	12	Completion Date (via calendar days) Plus Working Days	April 1, 2008	
80293	13	Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	April 1, 2015
80311	14	Concrete End Sections for Pipe Culverts	Jan. 1, 2013	April 1, 2016
80277	15	Concrete Mix Design - Department Provided	Jan. 1, 2012	April 1, 2016
80261	16	✓ Construction Air Quality - Diesel Retrofit	June 1, 2010	Nov. 1, 2014
80029	17	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Jan. 2, 2016
80369	18	Engineer's Field Office	April 1, 2016	
80358	19	Equal Employment Opportunity	April 1, 2015	
80364	20	✓ Errata for the 2016 Standard Specifications	April 1, 2016	
80229	21	Fuel Cost Adjustment	April 1, 2009	July 1, 2015
80304	22	Grooving for Recessed Pavement Markings	Nov. 1, 2012	Aug. 1, 2014
80246	23	✓ Hot-Mix Asphalt - Density Testing of Longitudinal Joints	Jan. 1, 2010	April 1, 2016
80347	24	Hot-Mix Asphalt - Pay for Performance Using Percent Within Limits - Jobsite Sampling	Nov. 1, 2014	April 1, 2016
80336	25	Longitudinal Joint and Crack Patching	April 1, 2016	April 1, 2016
80045	26	Material Transfer Device	June 15, 1999	Aug. 1, 2014
80342	27	✓ Mechanical Side-Tie Bar Insert	Aug. 1, 2014	April 1, 2016
80165	28	Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
80361	29	Overhead Sign Structures Certification of Metal Fabricator	Nov. 1, 2015	April 1, 2016
80349	30	Pavement Marking Jacket Tape	Nov. 1, 2014	April 1, 2016
80298	31	Pavement Marking Tape Type IV	April 1, 2012	April 1, 2016
80365	32	Pedestrian Push-Button	April 1, 2016	
80359	33	Portland Cement Concrete Bridge Deck Curing	April 1, 2015	April 1, 2016
80353	34	Portland Cement Concrete Inlay or Overlay	Jan. 1, 2015	April 1, 2016
80338	35	Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	April 1, 2014	April 1, 2016
80300	36	Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	April 1, 2016
80328	37	Progress Payments	Nov. 2, 2013	
34261	38	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157	39	Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
80306	40	Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	April 1, 2016
80340	41	Speed Display Trailer	April 2, 2014	April 1, 2016
80127	42	Steel Cost Adjustment	April 2, 2004	July 1, 2015
80362	43	Steel Slag in Trench Backfill	Jan. 1, 2016	
* 80317	44	Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	April 1, 2016

<u>File Name</u>	<u>Special Provision Title</u>	<u>New Location</u>	<u>Effective</u>	<u>Revised</u>
80357	Urban Half Road Closure with Mountable Median	Articles 701.18, 701.19, and 701.20	Jan. 1, 2015	July 1, 2015
80346	Waterway Obstruction Warning Luminaire	Article 1067.07	Aug. 1, 2014	April 1, 2015

The following special provisions require additional information from the designer. The additional information needs to be included in a separate document attached to this check sheet. The Project Development and Implementation section will then include the information in the applicable special provision. The Special Provisions are:

- Bridge Demolition Debris
- Building Removal-Case I
- Building Removal-Case II
- Building Removal-Case III
- Building Removal-Case IV
- Completion Date
- Completion Date Plus Working Days
- DBE Participation
- Material Transfer Device
- Railroad Protective Liability Insurance
- Training Special Provisions
- Working Days

## BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE) (RETURN FORM WITH BID)

Effective: November 2, 2006

Revised: July 1, 2015

**Description.** Bituminous material cost adjustments will be made to provide additional compensation to the Contractor, or credit to the Department, for fluctuations in the cost of bituminous materials when optioned by the Contractor. The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments.

The adjustments shall apply to permanent and temporary hot-mix asphalt (HMA) mixtures, bituminous surface treatments (cover and seal coats), and preventative maintenance type surface treatments that are part of the original proposed construction, or added as extra work and paid for by agreed unit prices. The adjustments shall not apply to bituminous prime coats, tack coats, crack filling/sealing, joint filling/sealing, or extra work paid for at a lump sum price or by force account.

**Method of Adjustment.** Bituminous materials cost adjustments will be computed as follows.

$$CA = (BPI_P - BPI_L) \times (\%AC_V / 100) \times Q$$

Where: CA = Cost Adjustment, \$.

BPI<sub>P</sub> = Bituminous Price Index, as published by the Department for the month the work is performed, \$/ton (\$/metric ton).

BPI<sub>L</sub> = Bituminous Price Index, as published by the Department for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price, \$/ton (\$/metric ton).

%AC<sub>V</sub> = Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the % AC<sub>V</sub> will be determined from the adjusted job mix formula. For bituminous materials applied, a performance graded or cutback asphalt will be considered to be 100% AC<sub>V</sub> and undiluted emulsified asphalt will be considered to be 65% AC<sub>V</sub>.

Q = Authorized construction Quantity, tons (metric tons) (see below).

For HMA mixtures measured in square yards:  $Q, \text{ tons} = A \times D \times (G_{mb} \times 46.8) / 2000$ . For HMA mixtures measured in square meters:  $Q, \text{ metric tons} = A \times D \times (G_{mb} \times 1) / 1000$ . When computing adjustments for full-depth HMA pavement, separate calculations will be made for the binder and surface courses to account for their different  $G_{mb}$  and % AC<sub>V</sub>.

For bituminous materials measured in gallons:  $Q, \text{ tons} = V \times 8.33 \text{ lb/gal} \times SG / 2000$

For bituminous materials measured in liters:  $Q, \text{ metric tons} = V \times 1.0 \text{ kg/L} \times SG / 1000$

Where: A = Area of the HMA mixture, sq yd (sq m).

- D = Depth of the HMA mixture, in. (mm).  
G<sub>mb</sub> = Average bulk specific gravity of the mixture, from the approved mix design.  
V = Volume of the bituminous material, gal (L).  
SG = Specific Gravity of bituminous material as shown on the bill of lading.

**Basis of Payment.** Bituminous materials cost adjustments may be positive or negative but will only be made when there is a difference between the BPI<sub>L</sub> and BPI<sub>P</sub> in excess of five percent, as calculated by:

$$\text{Percent Difference} = \{(BPI_L - BPI_P) \div BPI_L\} \times 100$$

Bituminous materials cost adjustments will be calculated for each calendar month in which applicable bituminous material is placed; and will be paid or deducted when all other contract requirements for the work placed during the month are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Return With Bid

**ILLINOIS DEPARTMENT  
OF TRANSPORTATION**

**OPTION FOR  
BITUMINOUS MATERIALS COST ADJUSTMENTS**

The bidder shall submit this completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments. After award, this form, when submitted, shall become part of the contract.

Contract No.: \_\_\_\_\_

Company Name: \_\_\_\_\_

**Contractor's Option:**

Is your company opting to include this special provision as part of the contract?

Yes

No

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

80173

## COARSE AGGREGATE QUALITY (BDE)

Effective: July 1, 2015

Revise Article 1004.01(b) of the Standard Specifications to read:

“(b) Quality. The coarse aggregate shall be according to the quality standards listed in the following table.

COARSE AGGREGATE QUALITY				
QUALITY TEST	CLASS			
	A	B	C	D
Na <sub>2</sub> SO <sub>4</sub> Soundness 5 Cycle, ITP 104 <sup>1/</sup> , % Loss max.	15	15	20	25 <sup>2/</sup>
Los Angeles Abrasion, ITP 96 <sup>11/</sup> , % Loss max.	40 <sup>3/</sup>	40 <sup>4/</sup>	40 <sup>5/</sup>	45
Minus No. 200 (75 µm) Sieve Material, ITP 11	1.0 <sup>6/</sup>	---	2.5 <sup>7/</sup>	---
Deleterious Materials <sup>10/</sup>				
Shale, % max.	1.0	2.0	4.0 <sup>8/</sup>	---
Clay Lumps, % max.	0.25	0.5	0.5 <sup>8/</sup>	---
Coal & Lignite, % max.	0.25	---	---	---
Soft & Unsound Fragments, % max.	4.0	6.0	8.0 <sup>8/</sup>	---
Other Deleterious, % max.	4.0 <sup>9/</sup>	2.0	2.0 <sup>8/</sup>	---
Total Deleterious, % max.	5.0	6.0	10.0 <sup>8/</sup>	---
Oil-Stained Aggregate <sup>10/</sup> , % max	5.0	---	---	---

1/ Does not apply to crushed concrete.

2/ For aggregate surface course and aggregate shoulders, the maximum percent loss shall be 30.

3/ For portland cement concrete, the maximum percent loss shall be 45.

4/ Does not apply to crushed slag or crushed steel slag.

5/ For hot-mix asphalt (HMA) binder mixtures, except when used as surface course, the maximum percent loss shall be 45.

6/ For crushed aggregate, if the material finer than the No. 200 (75 µm) sieve consists of the dust from fracture, essentially free from clay or silt, this percentage may be increased to 2.5.

7/ Does not apply to aggregates for HMA binder mixtures.

8/ Does not apply to Class A seal and cover coats.

9/ Includes deleterious chert. In gravel and crushed gravel aggregate, deleterious chert shall be the lightweight fraction separated in a 2.35 heavy media separation. In crushed stone aggregate, deleterious chert shall be the lightweight fraction separated in a 2.55 heavy media separation. Tests shall be run according to ITP 113.

10/ Test shall be run according to ITP 203.

11/ Does not apply to crushed slag.

All varieties of chert contained in gravel coarse aggregate for portland cement concrete, whether crushed or uncrushed, pure or impure, and irrespective of color, will be classed as chert and shall not be present in the total aggregate in excess of 25 percent by weight (mass).

Aggregates used in Class BS concrete (except when poured on subgrade), Class PS concrete, and Class PC concrete (bridge superstructure products only, excluding the approach slab) shall contain no more than two percent by weight (mass) of deleterious materials. Deleterious materials shall include substances whose disintegration is accompanied by an increase in volume which may cause spalling of the concrete."

80360

## CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

Effective: June 1, 2010

Revised: November 1, 2014

The reduction of emissions of particulate matter (PM) for off-road equipment shall be accomplished by installing retrofit emission control devices. The term "equipment" refers to diesel fuel powered devices rated at 50 hp and above, to be used on the jobsite in excess of seven calendar days over the course of the construction period on the jobsite (including rental equipment).

Contractor and subcontractor diesel powered off-road equipment assigned to the contract shall be retrofitted using the phased in approach shown below. Equipment that is of a model year older than the year given for that equipment's respective horsepower range shall be retrofitted:

Effective Dates	Horsepower Range	Model Year
June 1, 2010 <sup>1/</sup>	600-749	2002
	750 and up	2006
June 1, 2011 <sup>2/</sup>	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006
June 1, 2012 <sup>2/</sup>	50-99	2004
	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006

1/ Effective dates apply to Contractor diesel powered off-road equipment assigned to the contract.

2/ Effective dates apply to Contractor and subcontractor diesel powered off-road equipment assigned to the contract.

The retrofit emission control devices shall achieve a minimum PM emission reduction of 50 percent and shall be:

- a) Included on the U.S. Environmental Protection Agency (USEPA) *Verified Retrofit Technology List* (<http://www.epa.gov/cleandiesel/verification/verif-list.htm>), or verified by the California Air Resources Board (CARB) (<http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>); or
- b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit

device manufacturer that the emission control device provides a minimum PM emission reduction of 50 percent.

Note: Large cranes (Crawler mounted cranes) which are responsible for critical lift operations are exempt from installing retrofit emission control devices if such devices adversely affect equipment operation.

Diesel powered off-road equipment with engine ratings of 50 hp and above, which are unable to be retrofitted with verified emission control devices or if performance certifications are not available which will achieve a minimum 50 percent PM reduction, may be granted a waiver by the Department if documentation is provided showing good faith efforts were made by the Contractor to retrofit the equipment.

Construction shall not proceed until the Contractor submits a certified list of the diesel powered off-road equipment that will be used, and as necessary, retrofitted with emission control devices. The list(s) shall include (1) the equipment number, type, make, Contractor/rental company name; and (2) the emission control devices make, model, USEPA or CARB verification number, or performance certification from the retrofit device manufacturer. Equipment reported as fitted with emissions control devices shall be made available to the Engineer for visual inspection of the device installation, prior to being used on the jobsite.

The Contractor shall submit an updated list of retrofitted off-road construction equipment as retrofitted equipment changes or comes on to the jobsite. The addition or deletion of any diesel powered equipment shall be included on the updated list.

If any diesel powered off-road equipment is found to be in non-compliance with any portion of this special provision, the Engineer will issue the Contractor a diesel retrofit deficiency deduction.

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall not be grounds for a claim.

#### **Diesel Retrofit Deficiency Deduction**

When the Engineer determines that a diesel retrofit deficiency exists, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

The deficiency will be based on lack of diesel retrofit emissions control.

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment in a contract period, the Contractor will be shutdown until the deficiency is corrected.

Such a shutdown will not be grounds for any extension of the contract time, waiver of penalties, or be grounds for any claim.

80261

## **ERRATA FOR THE 2016 STANDARD SPECIFICATIONS (BDE)**

**Effective: April 1, 2016**

- Page 84** Article 204.02. In the seventh line of the first paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)".
- Page 90** Article 205.06. In the first sentence of the third paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)".
- Page 91** Article 205.06. In the first sentence of the fourth paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)", and in the second sentence change "AASHTO T 224" to "Illinois Modified AASHTO T 99 (Annex A1)".
- Page 91** Article 205.06. In the second line of the fifth paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191".
- Page 91** Article 205.06. In the sixth line of the eighth paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)".
- Page 148** Article 302.09. In the second sentence of the fifth paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191", and in the third sentence change "AASHTO T 99" to "Illinois Modified AASHTO T 99".
- Page 152** Article 310.09. In the second sentence of the second paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191", and in the third sentence change "AASHTO T 99" to "Illinois Modified AASHTO T 99".
- Page 155** Article 311.05(a). In the first sentence of the fifth paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)", and in the second sentence change "AASHTO T 224" to "Illinois Modified AASHTO T 99 (Annex A1)".
- Page 155** Article 311.05(a). In the second line of the sixth paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191".
- Page 163** Article 351.05(a). In the second sentence of the fifth paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)", and in the third sentence change "AASHTO T 224" to "Illinois Modified AASHTO T 99 (Annex A1)".
- Page 163** Article 351.05(a). In the second line of the sixth paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191".
- Page 169** Article 352.11. In the second sentence of the fourth paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191", and in the third sentence change "AASHTO T 134 (Method B)" to "Illinois Modified AASHTO T 134 (Method B)".

Page 169 Article 352.12. In the first sentence of the first paragraph change "AASHTO T 22" to "Illinois Modified AASHTO T 22", and in the second sentence change "AASHTO T 134 (Method B)" to "Illinois Modified AASHTO T 134 (Method B)".

Page 196 Article 406.07(a). After the footnotes in Table 1 - Minimum Roller Requirements for HMA add the following:

"EQUIPMENT DEFINITION"

- V<sub>s</sub> - Vibratory roller, static mode, minimum 125 lb/in. (2.2 kg/mm) of roller width. Maximum speed = 3 mph (5 km/h) or 264 ft/min (80 m/min). If the vibratory roller does not eliminate roller marks, its use shall be discontinued and a tandem roller, adequately ballasted to remove roller marks, shall be used.
- V<sub>D</sub> - Vibratory roller, dynamic mode, operated at a speed to produce not less than 10 impacts/ft (30 impacts/m).
- P - Pneumatic-tired roller, max. speed 3 1/2 mph (5.5 km/h) or 308 ft/min (92 m/min). The pneumatic-tired roller shall have a minimum tire pressure of 80 psi (550 kPa) and shall be equipped with heat retention shields. The self-propelled pneumatic-tired roller shall develop a compression of not less than 300 lb (53 N) nor more than 500 lb (88 N) per in. (mm) of width of the tire tread in contact with the HMA surface.
- T<sub>B</sub> - Tandem roller for breakdown rolling, 8 to 12 tons (7 to 11 metric tons), 250 to 400 lb/in. (44 to 70 N/mm) of roller width, max. speed = 3 1/2 mph (5.5 km/h) or 308 ft/min (92 m/min).
- T<sub>F</sub> - Tandem roller for final rolling, 200 to 400 lb/in. (35 to 70 N/mm) of roller width with minimum roller width of 50 in. (1.25 m). Ballast shall be increased if roller marks are not eliminated. Ballast shall be decreased if the mat shoves or distorts.
- 3W- Three wheel roller, max. speed = 3 mph (5 km/h) or 264 ft/min (80 m/min), 300 to 400 lb/in. (53 to 70 N/mm) of roller width. The three-wheel roller shall weigh 10 to 12 tons (9 to 11 metric tons)."

Page 331 Article 505.04(p). Under Range of Clearance in the first table change "in. x 10<sup>-6</sup>" to "in. x 10<sup>-3</sup>".

Page 444 Article 542.03. In the Notes in Table IIIB add "CPP Corrugated Polypropylene (CPP) pipe with smooth interior".

- Page 445 Article 542.03. In the fourth column in Table IIIB (metric) change the heading for Type 5 pipe from "CPE" to "CPP".
- Page 445 Article 542.03. In the Notes in Table IIIB (metric) change "PE Polyethylene (PE) pipe with a smooth interior" to "CPP Corrugated Polypropylene (CPP) pipe with smooth interior".
- Page 449 Article 542.04(f)(2). In the third line of the second paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)".
- Page 544 Article 639.03. In the first sentence of the first paragraph change "AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, Traffic Signals," to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals,"".
- Page 546 Article 640.03. In the first sentence of the first paragraph change "AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"".
- Page 548 Article 641.03. In the first sentence of the first paragraph change "AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaire and Traffic Signals," to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals,"".
- Page 621. Article 727.03. In the first sentence of the third paragraph change "AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"".
- Page 629 Article 734.03(a). In the fourth line of the second paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)".
- Page 649 Article 801.02. In the first sentence of the first paragraph change "AASHTO's Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"".
- Page 742 Article 1003.04(c). Under Gradation in the table change "(see Article 1003.02(c))" to "(see Article 1003.01(c))".
- Page 755 Article 1004.03(b). Revise the third sentence of the first paragraph to read "For Class A (seal or cover coat), and other binder courses, the coarse aggregate shall be Class C quality or better."

- Page 809 Article 1020.04(e). In the third line of the first paragraph change "ITP SCC-3" to "ITP SCC-4".
- Page 945 Article 1069.05. In the first sentence of the tenth paragraph change "Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals".
- Page 961 Article 1070.04(b)(1). In the third sentence of the first paragraph change "Standard Specifications of Structural Supports for Highway Signs, Luminaires and Traffic Signals" published by AASHTO" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals".
- Page 989 Article 1077.01. In the second sentence of the first paragraph change "Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, as published by AASHTO" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals".
- Page 1121 Article 1103.13(a). In the first line of the first paragraph change "Bridge Deck Approach Slabs." to "Bridge Deck and Approach Slabs."

80364

## HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)

Effective: January 1, 2010

Revised: April 1, 2106

**Description.** This work shall consist of testing the density of longitudinal joints as part of the quality control/quality assurance (QC/QA) of hot-mix asphalt (HMA). Work shall be according to Section 1030 of the Standard Specifications except as follows.

**Quality Control/Quality Assurance (QC/QA).** Delete the second and third sentence of the third paragraph of Article 1030.05(d)(3) of the Standard Specifications.

Add the following paragraphs to the end of Article 1030.05(d)(3) of the Standard Specifications:

"Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 4 in. (100 mm), from each pavement edge. (i.e. for a 5 in. (125 mm) lift the near edge of the density gauge or core barrel shall be within 5 in. (125 mm) from the edge of pavement.) Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.

- a. Confined Edge. Each confined edge density shall be represented by a one-minute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.
- b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced 10 ft (3 m) apart longitudinally along the unconfined pavement edge and centered at the random density test location."

Revise the Density Control Limits table in Article 1030.05(d)(4) of the Standard Specifications to read:

"Mixture Composition	Parameter	Individual Test (includes confined edges)	Unconfined Edge Joint Density Minimum
IL-4.75	Ndesign = 50	93.0 – 97.4% <sup>1/</sup>	91.0%
IL-9.5	Ndesign = 90	92.0 – 96.0%	90.0%
IL-9.5, IL-9.5L	Ndesign < 90	92.5 – 97.4%	90.0%
IL-19.0	Ndesign = 90	93.0 – 96.0%	90.0%
IL-19.0, IL-19.0L	Ndesign < 90	93.0 <sup>2/</sup> – 97.4%	90.0%
SMA	Ndesign = 50 & 80	93.5 – 97.4%	91.0%"

## **WARM MIX ASPHALT (BDE)**

Effective: January 1, 2012

Revised: April 1, 2016

**Description.** This work shall consist of designing, producing and constructing Warm Mix Asphalt (WMA) in lieu of Hot Mix Asphalt (HMA) at the Contractor's option. Work shall be according to Sections 406, 407, 408, 1030, and 1102 of the Standard Specifications, except as modified herein. In addition, any references to HMA in the Standard Specifications, or the special provisions shall be construed to include WMA.

WMA is an asphalt mixture which can be produced at temperatures lower than allowed for HMA utilizing approved WMA technologies. WMA technologies are defined as the use of additives or processes which allow a reduction in the temperatures at which HMA mixes are produced and placed. WMA is produced by the use of additives, a water foaming process, or combination of both. Additives include minerals, chemicals or organics incorporated into the asphalt binder stream in a dedicated delivery system. The process of foaming injects water into the asphalt binder stream, just prior to incorporation of the asphalt binder with the aggregate.

Approved WMA technologies may also be used in HMA provided all the requirements specified herein, with the exception of temperature, are met. However, asphalt mixtures produced at temperatures in excess of 275 °F (135 °C) will not be considered WMA when determining the grade reduction of the virgin asphalt binder grade.

### Equipment.

Revise the first paragraph of Article 1102.01 of the Standard Specifications to read:

**"1102.01 Hot-Mix Asphalt Plant.** The hot-mix asphalt (HMA) plant shall be the batch-type, continuous-type, or dryer drum plant. The plants shall be evaluated for prequalification rating and approval to produce HMA according to the current Bureau of Materials and Physical Research Policy Memorandum, "Approval of Hot-Mix Asphalt Plants and Equipment". Once approved, the Contractor shall notify the Bureau of Materials and Physical Research to obtain approval of all plant modifications. The plants shall not be used to produce mixtures concurrently for more than one project or for private work unless permission is granted in writing by the Engineer. The plant units shall be so designed, coordinated and operated that they will function properly and produce HMA having uniform temperatures and compositions within the tolerances specified. The plant units shall meet the following requirements."

Add the following to Article 1102.01(a) of the Standard Specifications.

"(11) Equipment for Warm Mix Technologies.

- a. Foaming. Metering equipment for foamed asphalt shall have an accuracy of  $\pm 2$  percent of the actual water metered. The foaming control system shall be electronically interfaced with the asphalt binder meter.

- b. Additives. Additives shall be introduced into the plant according to the supplier's recommendations and shall be approved by the Engineer. The system for introducing the WMA additive shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes."

#### Mix Design Verification.

Add the following to Article 1030.04 of the Standard Specifications.

"(e) Warm Mix Technologies.

- (1) Foaming. WMA mix design verification will not be required when foaming technology is used alone (without WMA additives). However, the foaming technology shall only be used on HMA designs previously approved by the Department.
- (2) Additives. WMA mix designs utilizing additives shall be submitted to the Engineer for mix design verification."

#### Construction Requirements.

Revise the second paragraph of Article 406.06(b)(1) of the Standard Specifications to read:

"The HMA shall be delivered at a temperature of 250 to 350 °F (120 to 175 °C).  
WMA shall be delivered at a minimum temperature of 215 °F (102 °C)."

#### Basis of Payment.

This work will be paid at the contract unit price bid for the HMA pay items involved. Anti-strip will not be paid for separately, but shall be considered as included in the cost of the work.

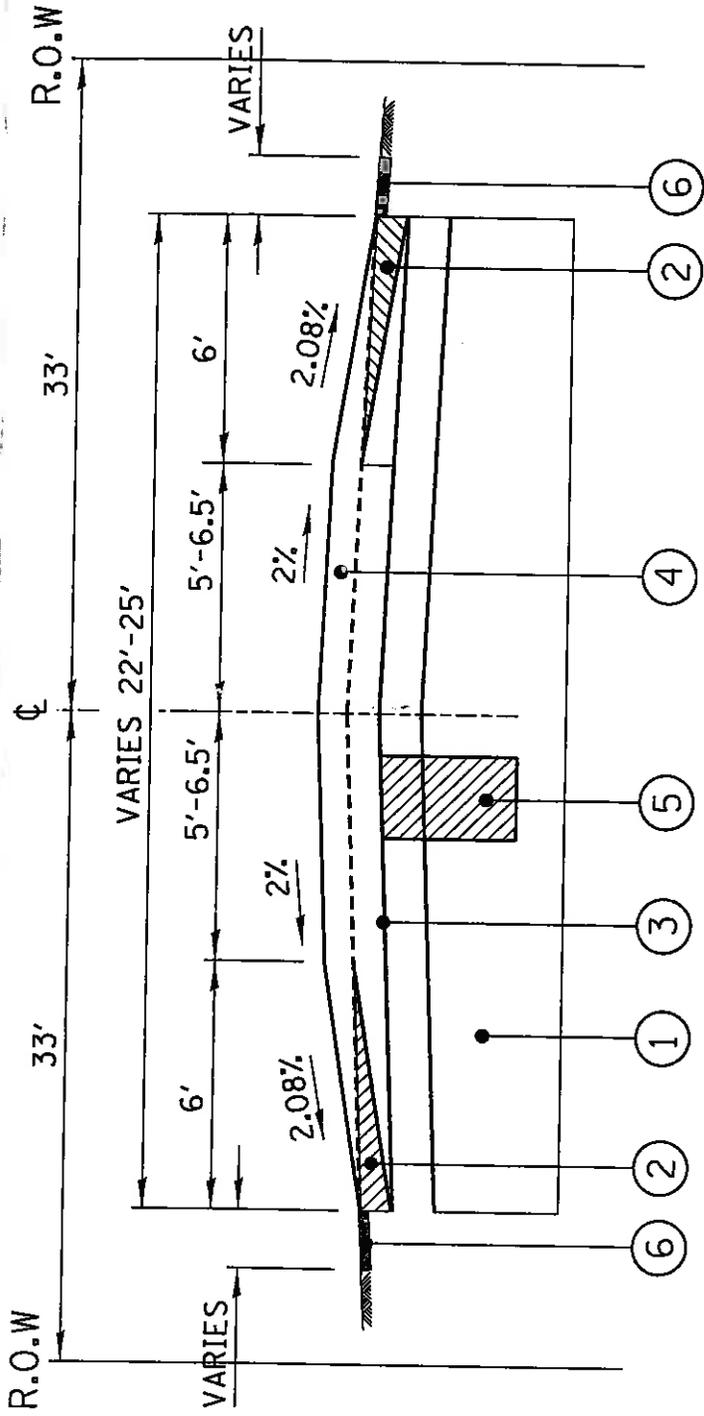
80288

**WORKING DAYS (BDE)**

Effective: January 1, 2002

The Contractor shall complete the work within 25 working days.

80071

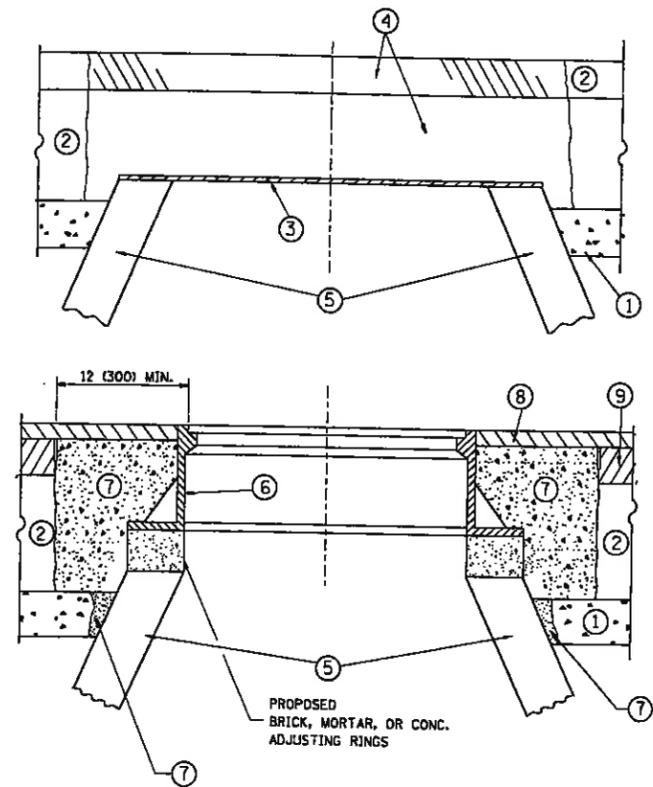


**EXISTING AND PROPOSED CROSS SECTION**

**(ARLENE PL, ELEANOR PL, 75TH PL, VIRGINIA CT, AND \*MIDWAY DR)**

- ① EXISTING AGGREGATE BASE
- ② MILL 1 1/2" OF EXISTING HOT MIX ASPHALT SURFACE (EDGE MILLING)
- ③ BITUMINOUS MATERIALS (TACK COAT) @ 0.05 POUNDS/SQ FT
- ④ PROPOSED HOT MIX ASPHALT SURFACE COURSE, MIX "D" N50 (1 1/2")
- ⑤ PROPOSED CLASS D PATCH, 6", SPECIAL, (AS DIRECTED BY ENGINEER)
- ⑥ EXISTING SHOULDERS

\* MIDWAY DR TO BE RESURFACED IN ALTERNATE BID ONLY



**CONSTRUCTION PROCEDURES**

**STAGE 1 (BEFORE PAVEMENT MILLING)**

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

**STAGE 2 (AFTER PAVEMENT MILLING)**

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1\* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

\* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

**LEGEND**

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS PP-1\* CONCRETE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE

**LOCATION OF STRUCTURES:**

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

**BASIS OF PAYMENT:**

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

**NOTES:**

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

**DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING**

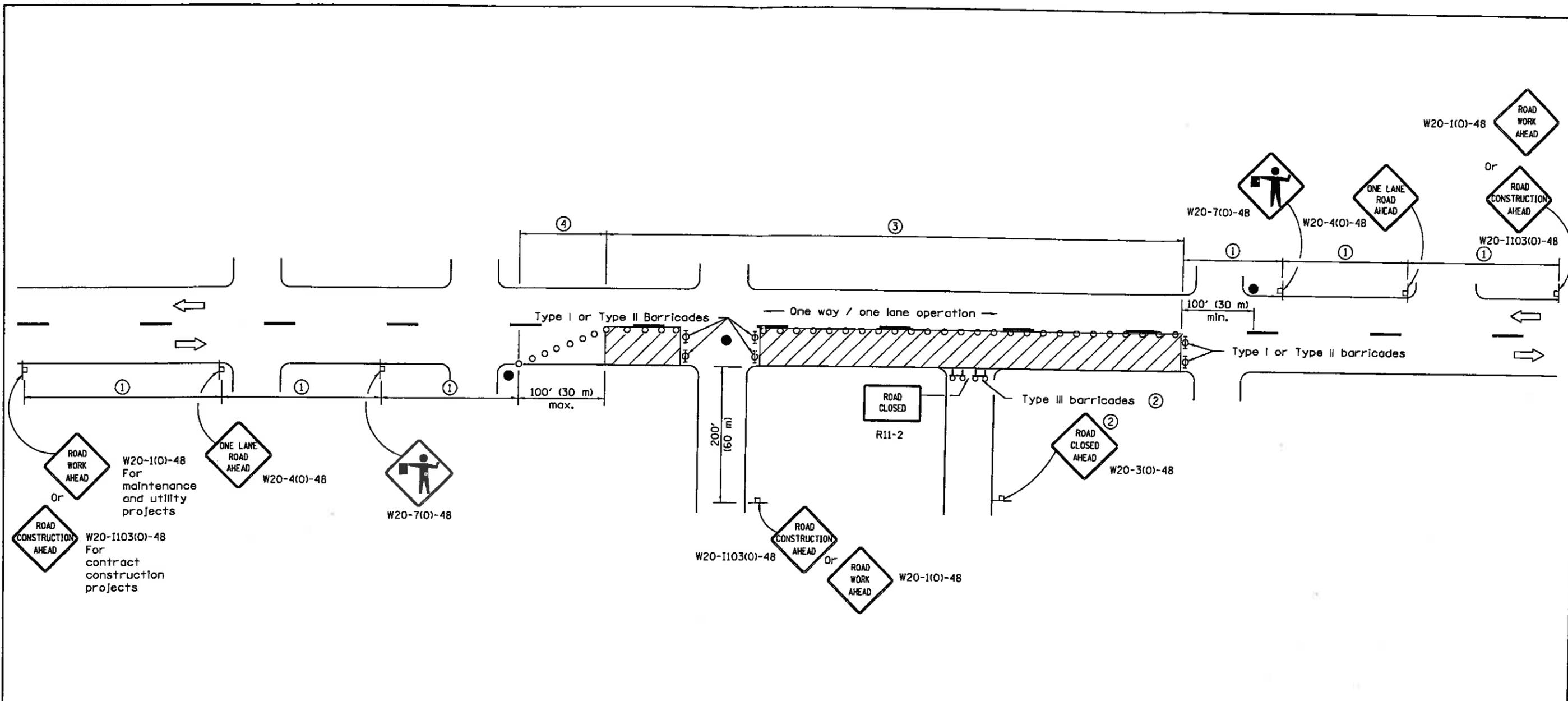
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME *	USER NAME *	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
		DRAWN -	REVISED - R. BORO 01-01-07
		CHECKED -	REVISED - R. BORO 03-09-11
		DATE - 10-25-94	REVISED - R. BORO 12-06-11

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING</b>	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BD600-03 (BD-8)			
FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT			CONTRACT NO.	



SIGN SPACING	
Posted Speed	Sign Spacing
55	500' (150 m)
50-45	350' (100 m)
<45	200' (60 m)

**SYMBOLS**

- Work area
- Cone, drum or barricade (not required for moving operations)
- Sign on portable or permanent support
- Flagger with traffic control sign
- Barricade or drum with flashing light
- Type III barricade with flashing lights

- ① Refer to SIGN SPACING TABLE for distances.
- ② For approved sideroad closures.
- ③ Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) centers. When drums or Type I or Type II barricades are used, the interval between devices may be doubled.
- ④ Cones, drums or barricades at 20' (6 m) centers.

**GENERAL NOTES**

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement requiring the closure of one traffic lane in an urban area.

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

APPROVED January 1, 2011  
*[Signature]*  
 ENGINEER OF SAFETY ENGINEERING

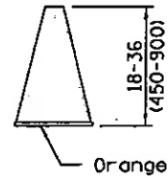
APPROVED January 1, 2011  
*[Signature]*  
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

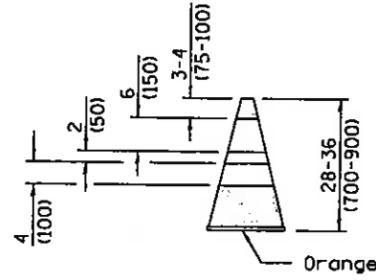
DATE	REVISIONS
1-1-11	Revised flagger sign.
1-1-09	Switched units to English (metric). Corrected sign No.'s.

**URBAN LANE CLOSURE,  
2L, 2W, UNDIVIDED**

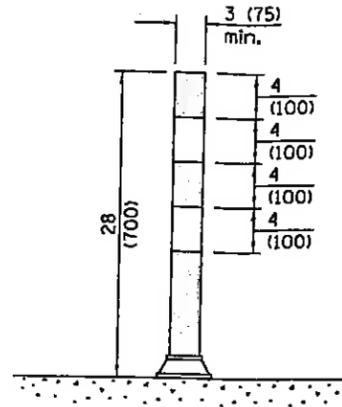
**STANDARD 701501-06**



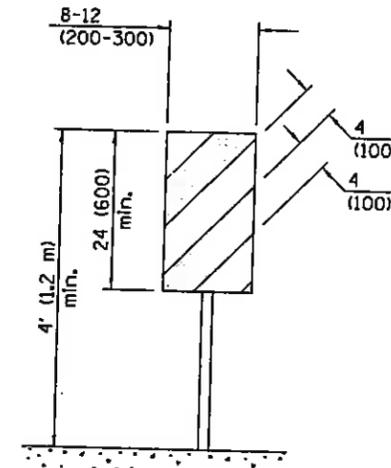
**CONE**



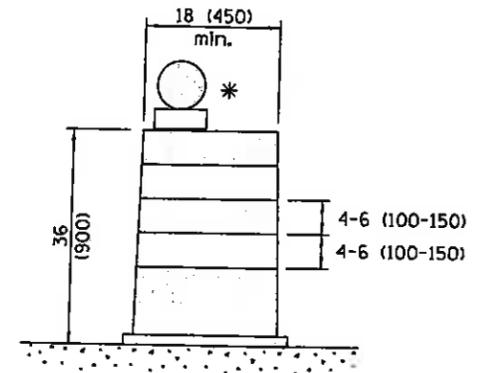
**REFLECTORIZED CONE**



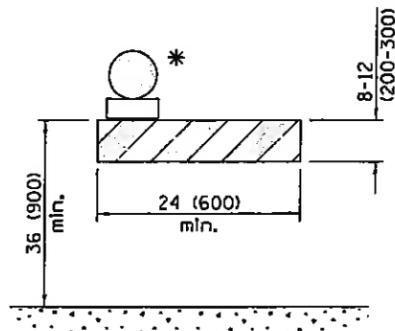
**FLEXIBLE DELINEATOR**



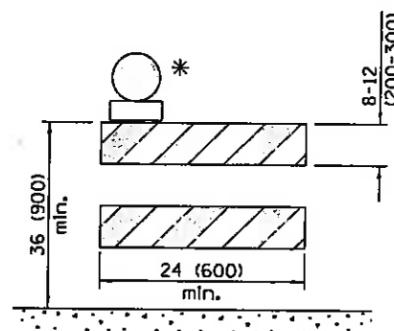
**VERTICAL PANEL  
POST MOUNTED**



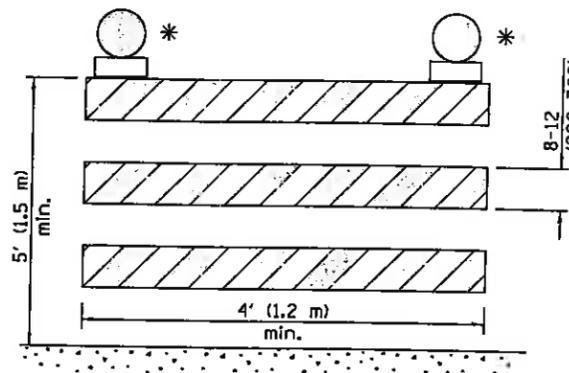
**DRUM**



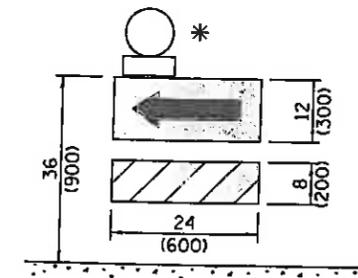
**TYPE I BARRICADE**



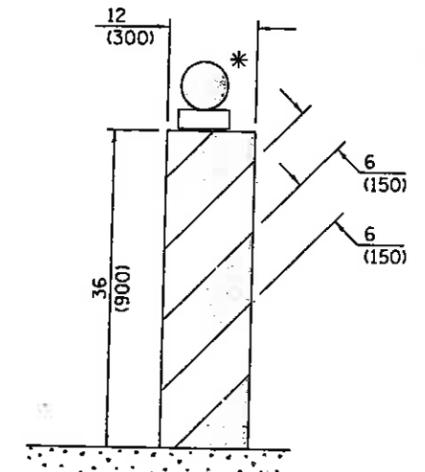
**TYPE II BARRICADE**



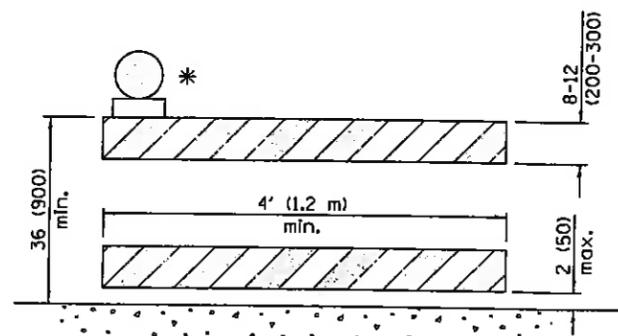
**TYPE III BARRICADE**



**DIRECTION INDICATOR  
BARRICADE**



**VERTICAL BARRICADE**



**DETECTABLE PEDESTRIAN  
CHANNELIZING BARRICADE**

\* Warning lights (if required)

Illinois Department of Transportation

APPROVED January 1, 2015  
*Jerry Allen*  
 ENGINEER OF OPERATIONS

APPROVED January 1, 2015  
*RE*  
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 16-1-1 02/15/15

DATE	REVISIONS
1-1-15	Revised two sign numbers on sheet 2. Added note reg. PHOTO ENFORCED plaque.
1-1-14	Modified flagger sign height. Added highway construction speed zone signs.

**GENERAL NOTES**

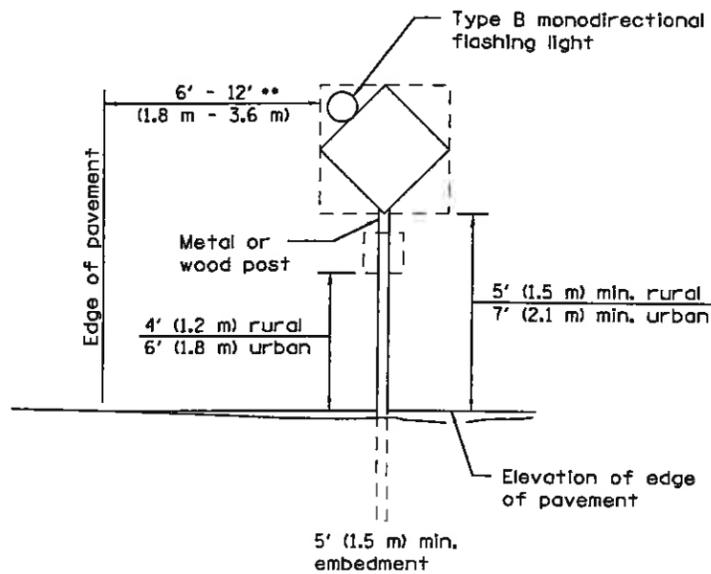
All heights shown shall be measured above the pavement surface.

All dimensions are in inches (millimeters) unless otherwise shown.

**TRAFFIC CONTROL  
DEVICES**

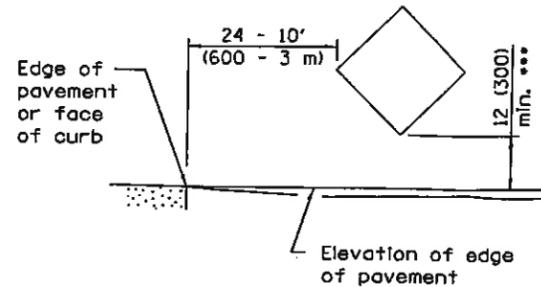
(Sheet 1 of 3)

**STANDARD 701901-04**



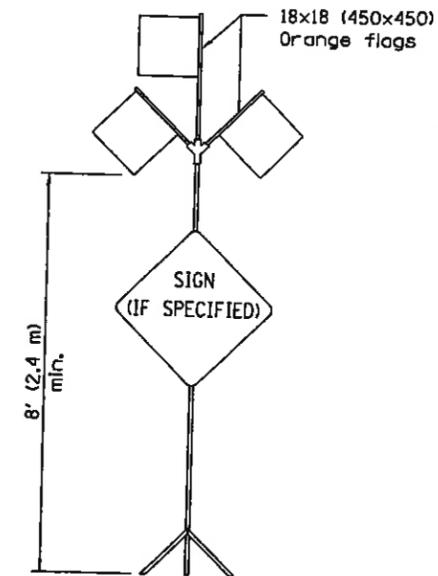
**POST MOUNTED SIGNS**

\*\* When curb or paved shoulder are present this dimension shall be 24 (600) to the face of curb or 6' (1.8 m) to the outside edge of the paved shoulder.

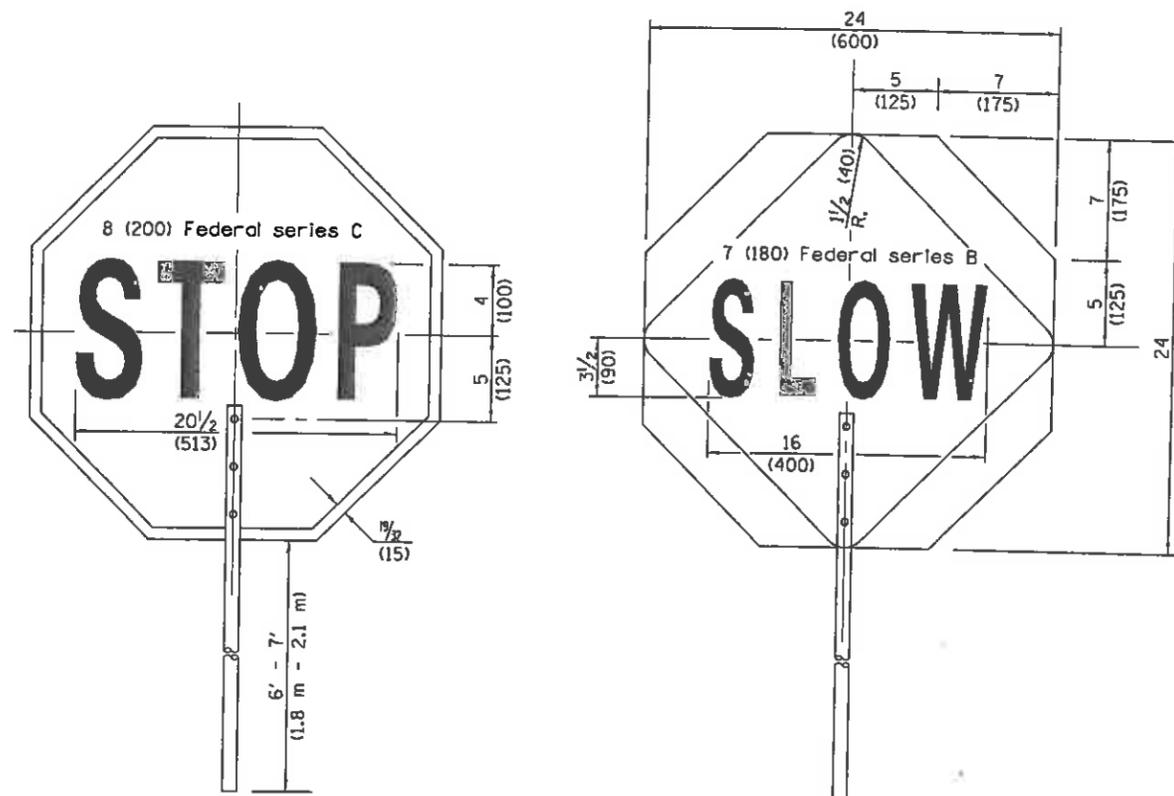


**SIGNS ON TEMPORARY SUPPORTS**

\*\*\* When work operations exceed four days, this dimension shall be 5' (1.5 m) min. If located behind other devices, the height shall be sufficient to be seen completely above the devices.



**HIGH LEVEL WARNING DEVICE**



FRONT SIDE

REVERSE SIDE

**FLAGGER TRAFFIC CONTROL SIGN**

ROAD CONSTRUCTION NEXT X MILES

END CONSTRUCTION

G20-1104(0)-6036

G20-1105(0)-6024

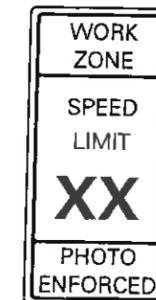
This signing is required for all projects 2 miles (3200 m) or more in length.

ROAD CONSTRUCTION NEXT X MILES sign shall be placed 500' (150 m) in advance of project limits.

END CONSTRUCTION sign shall be erected at the end of the job unless another job is within 2 miles (3200 m).

Dual sign displays shall be utilized on multi-lane highways.

**WORK LIMIT SIGNING**



W21-1115(0)-3618

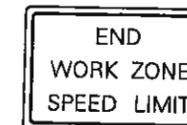
R2-1-3648

R10-1108p-3618 \*\*\*\*



R2-1106p-3618

Sign assembly as shown on Standards or as allowed by District Operations.



G20-1103(0)-6036

This sign shall be used when the above sign assembly is used.

**HIGHWAY CONSTRUCTION SPEED ZONE SIGNS**

\*\*\*\* R10-1108p shall only be used along roadways under the jurisdiction of the State.

**TRAFFIC CONTROL DEVICES**

(Sheet 2 of 3)

STANDARD 701901-04

Illinois Department of Transportation

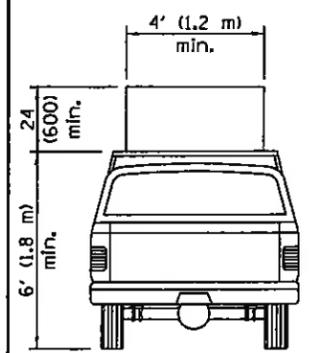
APPROVED January 1, 2015

ENGINEER OF OPERATIONS

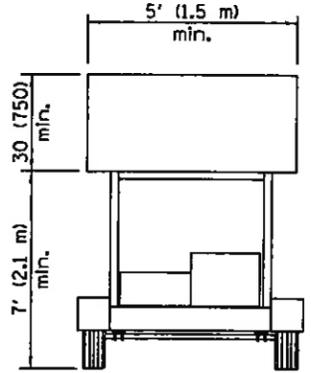
APPROVED January 1, 2015

ENGINEER OF DESIGN AND ENVIRONMENT

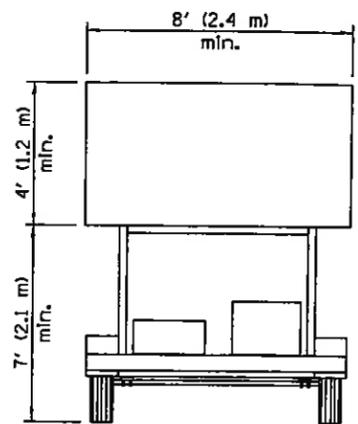
ISSUED 1-1-97



**TYPE A  
ROOF  
MOUNTED**

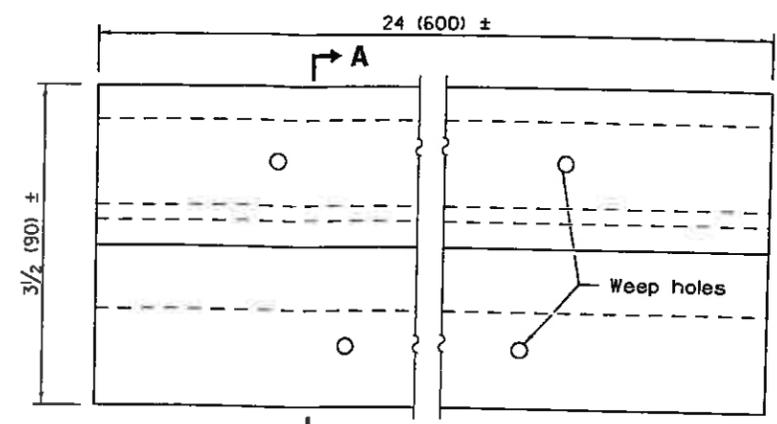


**TYPE B  
ROOF OR TRAILER  
MOUNTED**

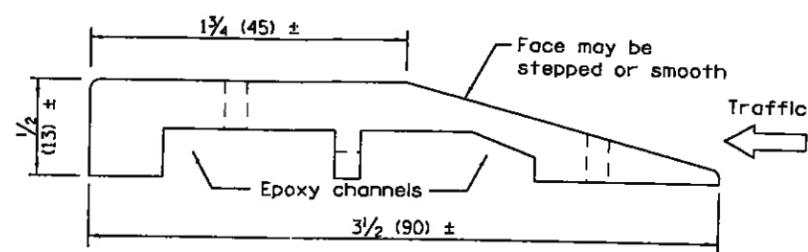


**TYPE C  
TRAILER  
MOUNTED**

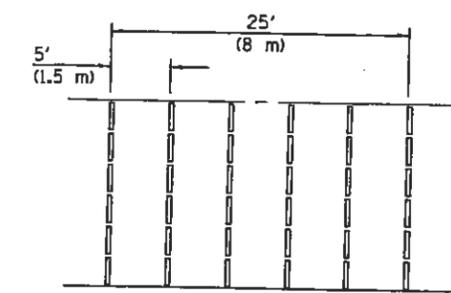
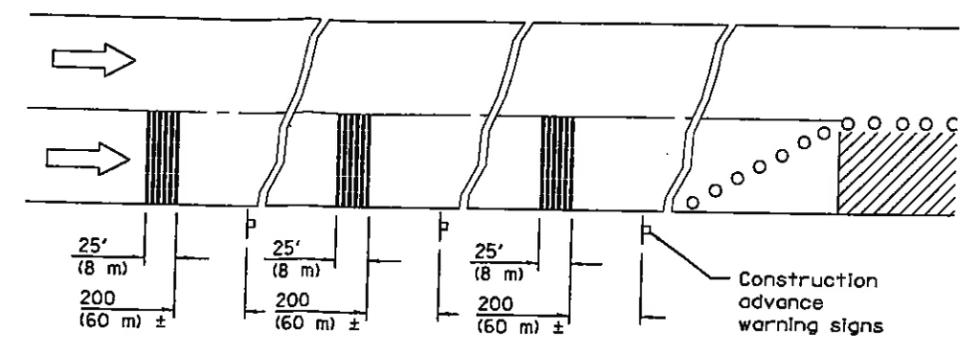
**ARROW BOARDS**



**PLAN**

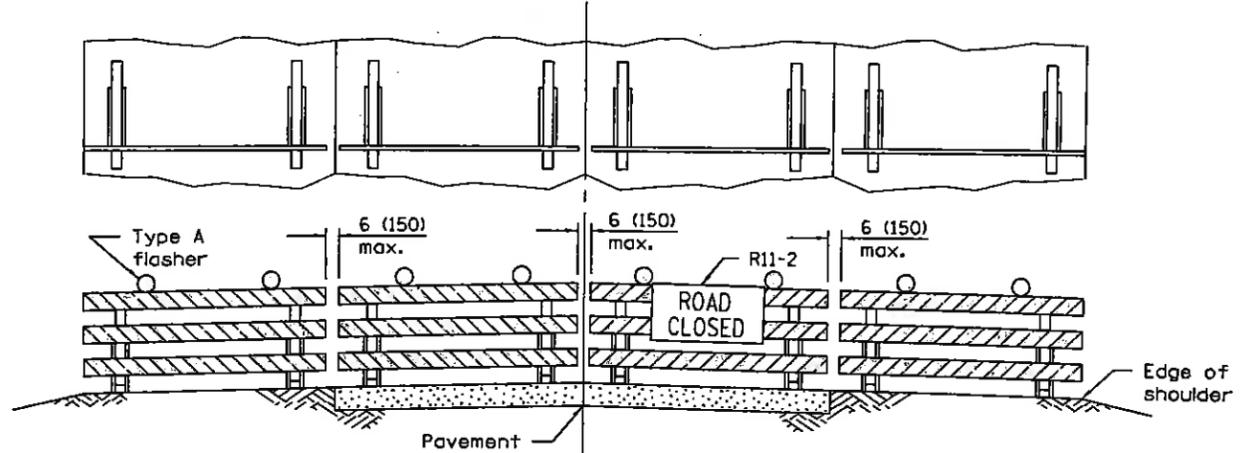


**SECTION A-A**



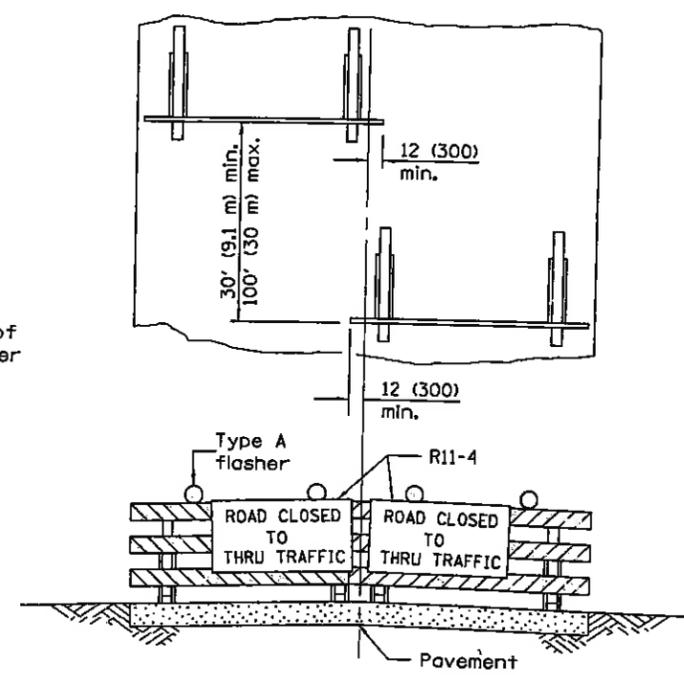
**TYPICAL INSTALLATION**

**TEMPORARY RUMBLE STRIPS**



**ROAD CLOSED TO ALL TRAFFIC**

Reflectorized striping may be omitted on the back side of the barricades. If a Type III barricade with an attached sign panel which meets NCHRP 350 is not available, the sign may be mounted on an NCHRP 350 temporary sign support directly in front of the barricade.



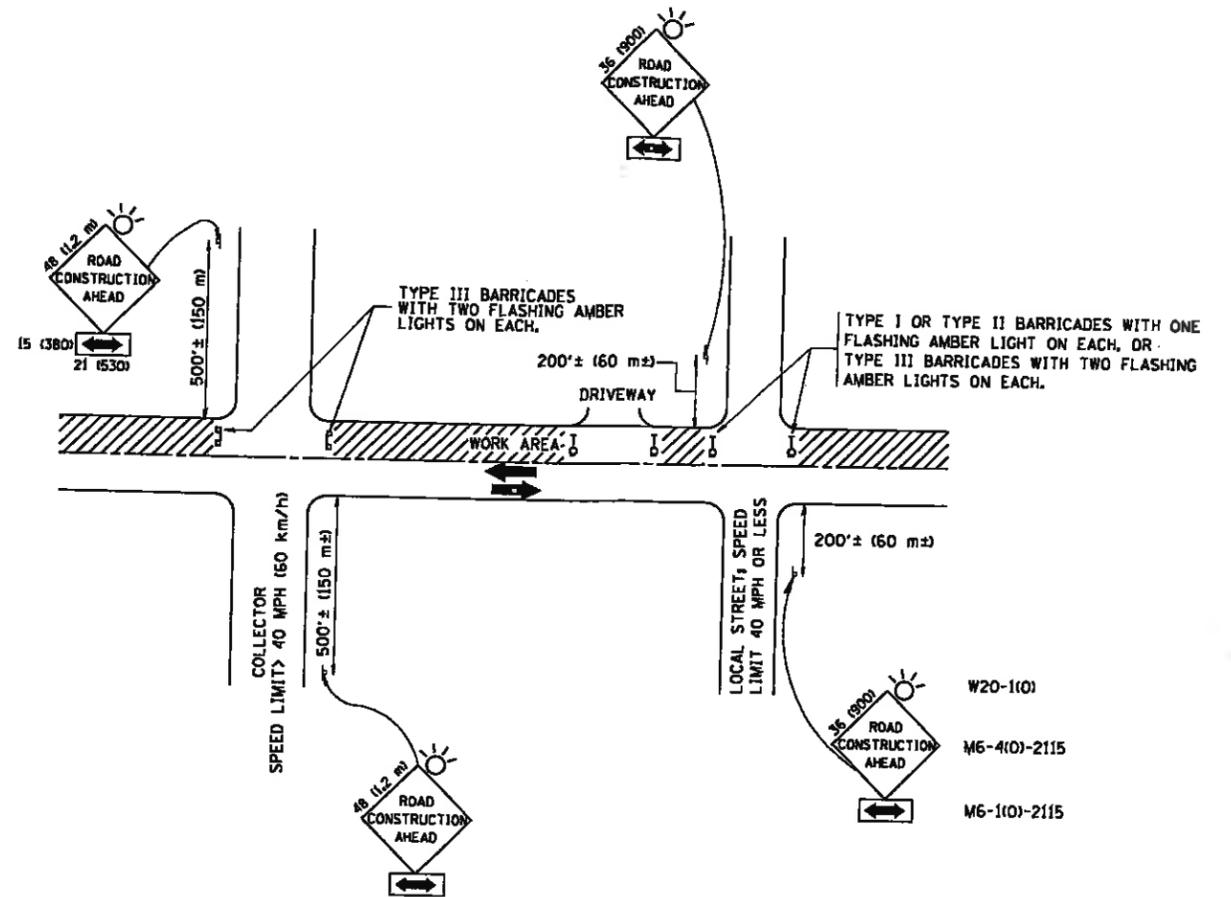
**ROAD CLOSED TO THRU TRAFFIC**

Reflectorized striping shall appear on both sides of the barricades. If a Type III barricade with an attached sign panel which meets NCHRP 350 is not available, the signs may be mounted on NCHRP 350 temporary sign supports directly in front of the barricade.

**TYPICAL APPLICATIONS OF  
TYPE III BARRICADES CLOSING A ROAD**

Illinois Department of Transportation  
 APPROVED January 1, 2015  
 ENGINEER OF OPERATIONS  
 APPROVED January 1, 2015  
 ENGINEER OF DESIGN AND ENVIRONMENT  
 ISSUED 1-1-97

**TRAFFIC CONTROL  
DEVICES**  
 (Sheet 3 of 3)  
**STANDARD 701901-04**



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 70150), STD. 701606 OR THE APPROPRIATE STANDARD. THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

FILE NAME *	USER NAME *	DESIGNED *	REVISOR *
W:\data\as01\22-34\101118.dwg	goglianobis	LHA	J. OBERLE 10-18-95
		DRAWN *	REVISOR *
			A. HOUSEH 03-05-96
		CHECKED *	REVISOR *
			A. HOUSEH 10-15-96
		DATE *	REVISOR *
		06-89	T. RAMMACHER 01-06-00

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

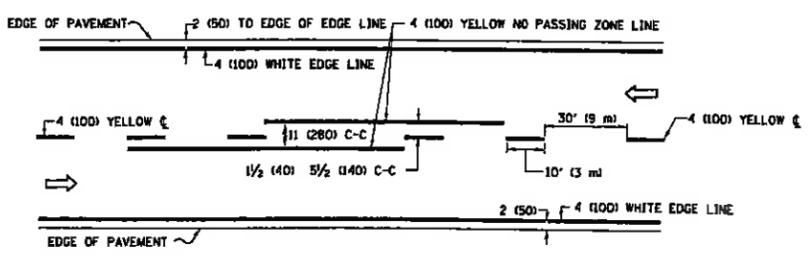
TRAFFIC CONTROL AND PROTECTION FOR  
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

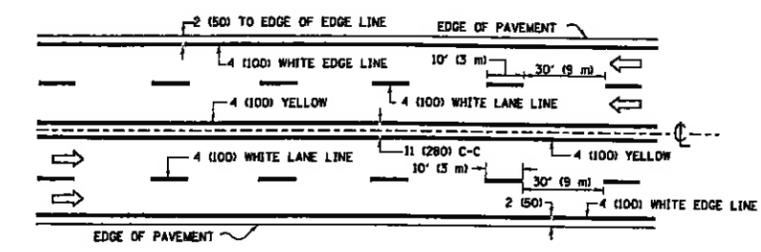
All dimensions are in millimeters (inches) unless otherwise shown.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TC-10			
FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT		CONTRACT NO.		

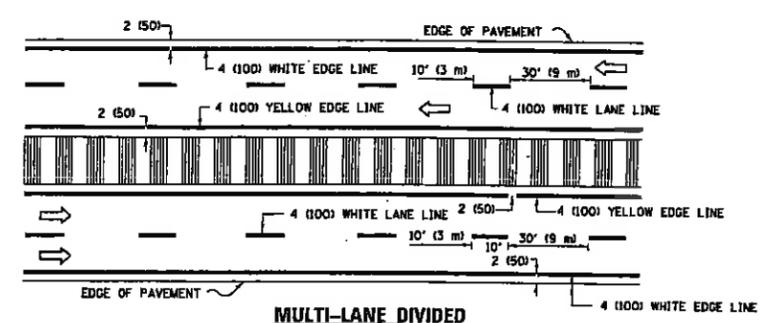
D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55



**2-LANE ROADWAY**

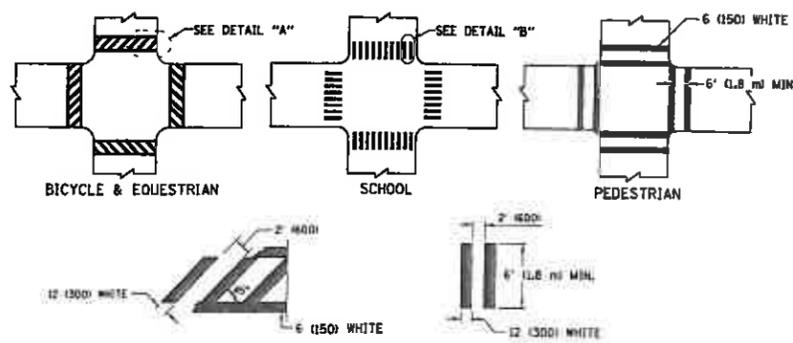


**MULTI-LANE UNDIVIDED**



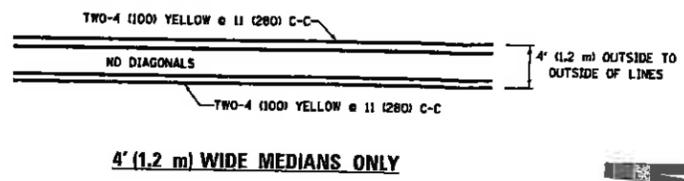
**MULTI-LANE DIVIDED WITH MEDIAN**

**TYPICAL LANE AND EDGE LINE MARKING**

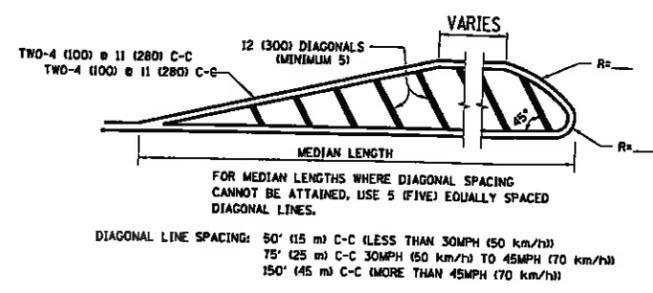


**TYPICAL CROSSWALK MARKING**

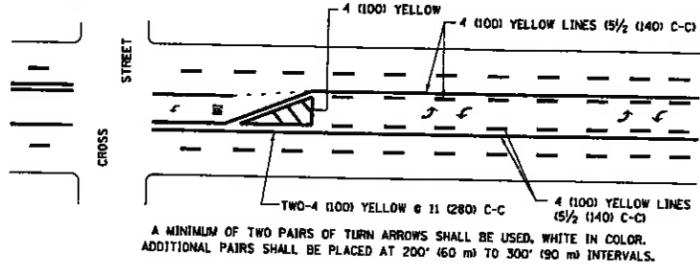
\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



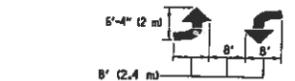
**4' (1.2 m) WIDE MEDIANS ONLY**



**MEDIANS OVER 4' (1.2 m) WIDE**



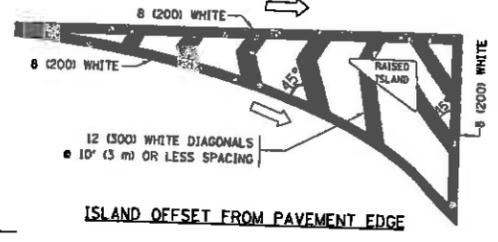
**MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING**



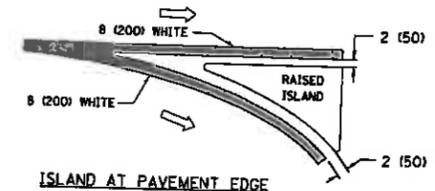
**TYPICAL LEFT (OR RIGHT) TURN LANE**

**TYPICAL TURN LANE MARKING**

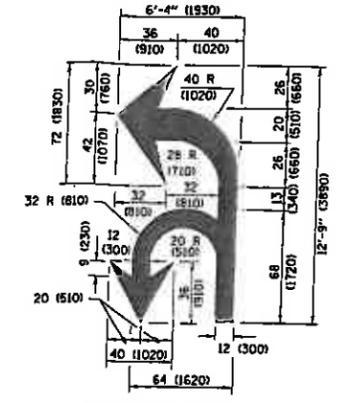
FULL SIZE LETTERS 8" (2.4 m) AND ARROWS SHALL BE USED.  
 1/4 AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) 1/2 AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
 \* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".



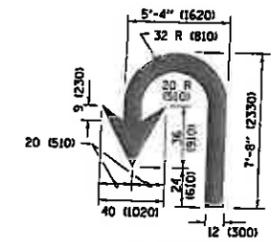
**ISLAND OFFSET FROM PAVEMENT EDGE**



**ISLAND AT PAVEMENT EDGE TYPICAL ISLAND MARKING**



**COMBINATION LEFT AND U-TURN**



**U-TURN**

**LANE REDUCTION TRANSITION**  
 \* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8" (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8" (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL))	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW TWO WAY TRAFFIC WHITE ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 15 6" (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 78000; AREA OF "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (22.5 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 78000.

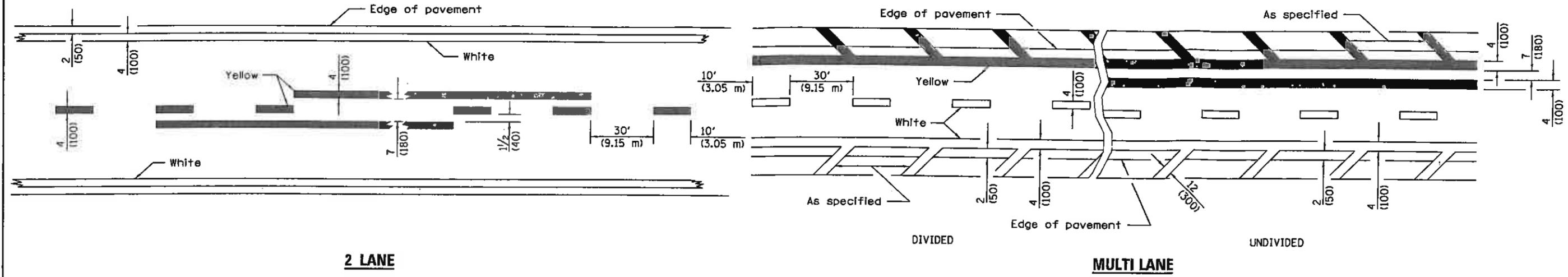
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = faotamj	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
pl:\NLB848IDINTEG\Illinois.gov\FWIDOT\Documents\IDOT Office\District 1\Projea\Dist 1\ORAN\CAD\Deto\CAD\sheet\1\13.dgn		CHECKED -	REVISED - C. JUCIUS 07-01-13
Default	PLDT SCALE = 58.888 % in.	DATE - 03-19-90	REVISED - C. JUCIUS 12-21-15
	PLDT DATE = 4/13/2016		REVISED - C. JUCIUS 04-12-16

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TYPICAL PAVEMENT MARKINGS						
SCALE: NONE	SHEET 1 OF 1 SHEETS	STA.	TO STA.	CONTRACT NO.		

TC-13		ILLINOIS FED. AID PROJECT	
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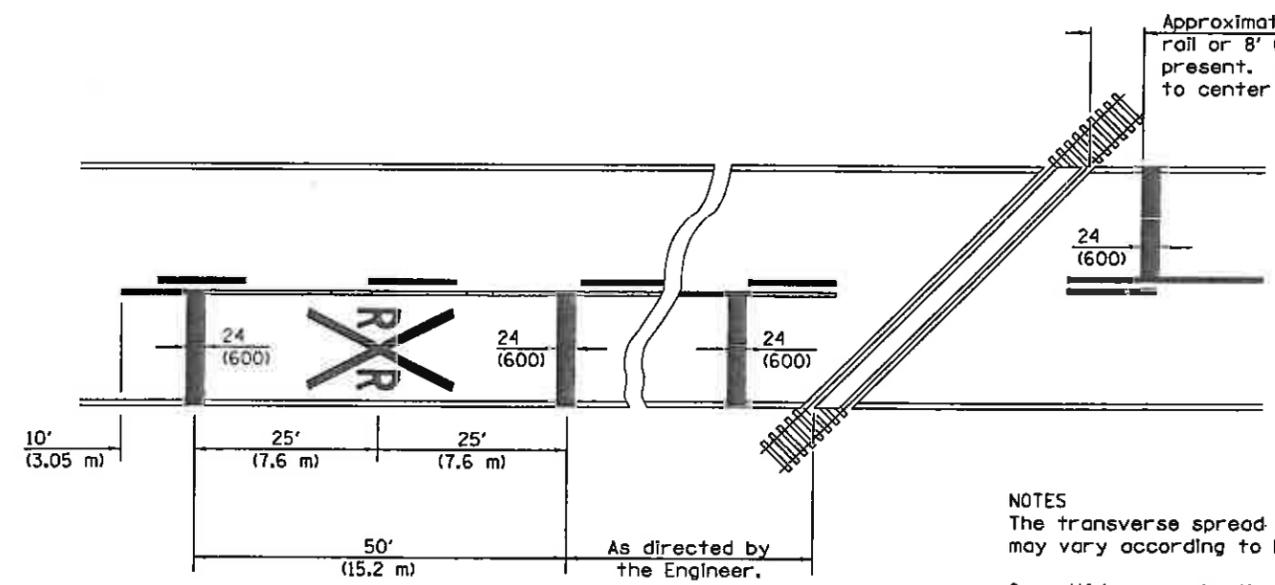
**2 LANE**

**DIVIDED**

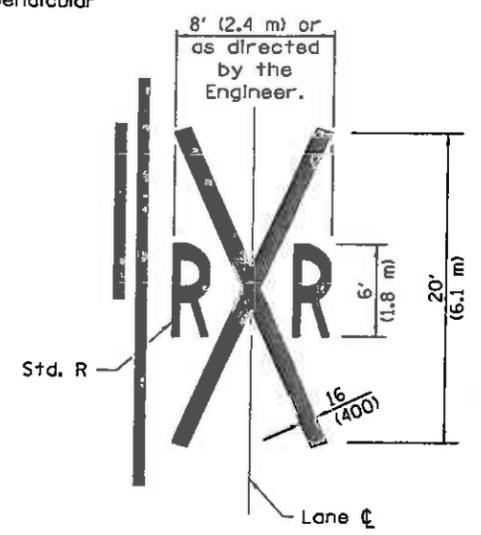
**MULTI LANE**

**UNDIVIDED**

**LANE AND EDGE LINES**



Approximately 15' (4.5 m) from nearest rail or 8' (2.4 m) back from gate, if present. Stop line placed perpendicular to center line.



**NOTES**  
 The transverse spread of the "X" may vary according to lane width.  
 On multi-lane roads, the stop lines shall extend across all approach lanes and separate RXR symbols shall be placed adjacent to each other in each lane.  
 When the pavement marking symbol is used, a portion of the symbol should be located directly adjacent to the Advance Warning Sign (W10-1) as placed by Table 2C-4, Condition B of the MUTCD.

**PAVEMENT MARKINGS AT RAILROAD-HIGHWAY GRADE CROSSING**

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

APPROVED January 1, 2015  
*John Allen*  
 ENGINEER OF OPERATIONS

APPROVED January 1, 2015  
*[Signature]*  
 ENGINEER OF DESIGN AND ENVIRONMENT

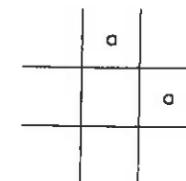
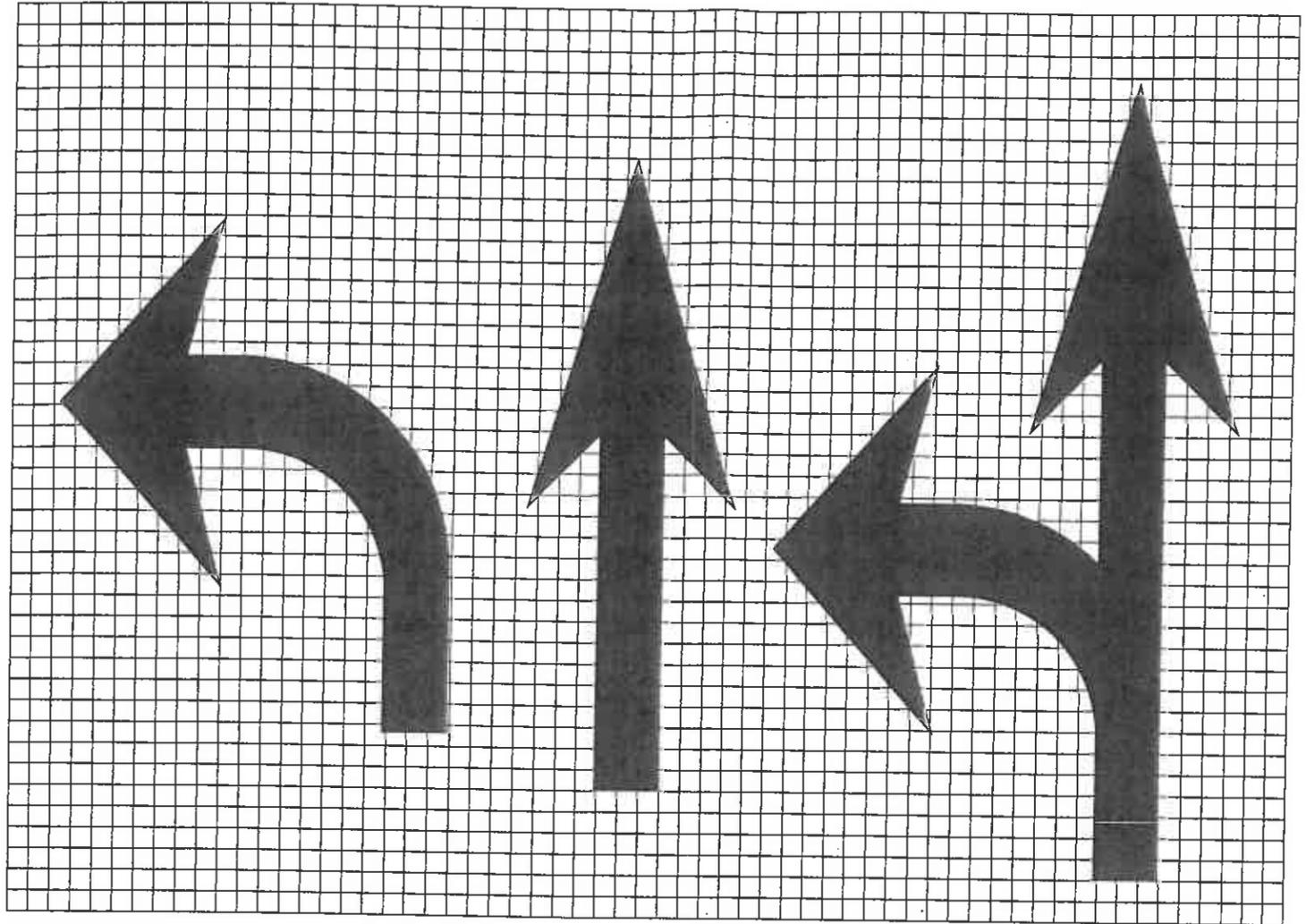
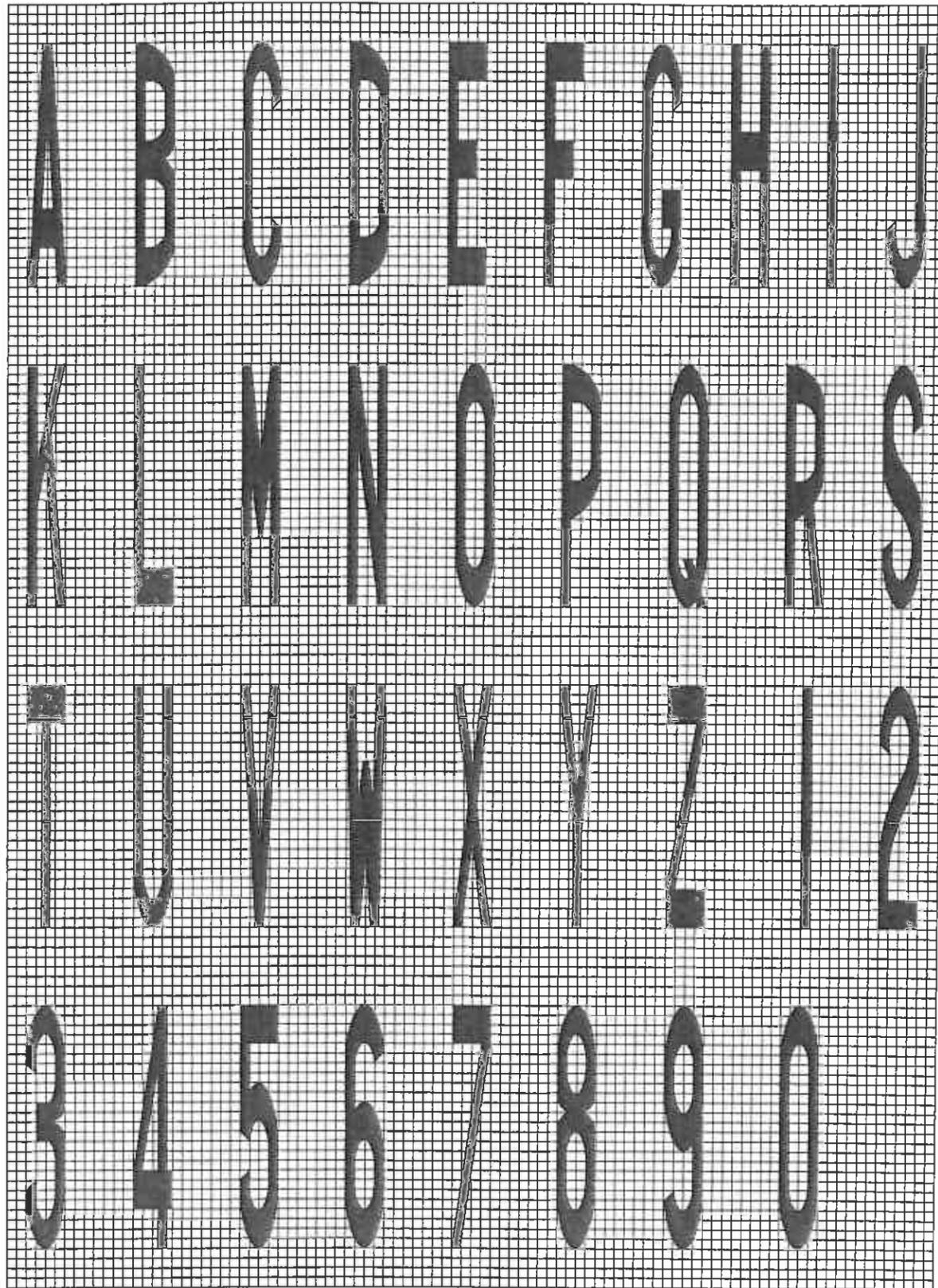
ISSUED 16-1-1-1-1-7

DATE	REVISIONS
1-1-15	Added symbols. Revised bike symbol. Revised note for stop line at RR crossing.
1-1-14	Added bike symbol. Renamed 'LANE DROP ARROW' detail to 'LANE-REDUCTION ARROW'.

**TYPICAL PAVEMENT MARKINGS**

(Sheet 1 of 3)

**STANDARD 780001-05**



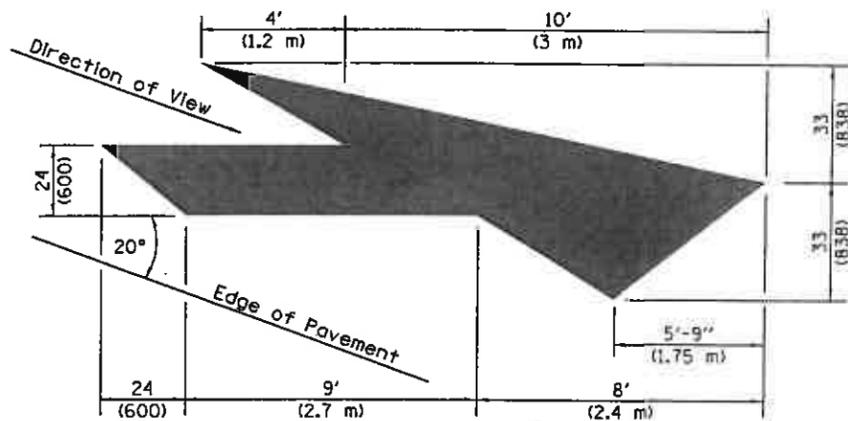
Legend Height	Arrow Size	a
6' (1.8 m)	Small	2.9 (74)
8' (2.4 m)	Large	3.8 (96)

The space between adjacent letters or numerals should be approximately 3 (75) for 6' (1.8 m) legend and 4 (100) for 8' (2.4 m) legend.

**LETTER AND ARROW GRID SCALE**

Illinois Department of Transportation  
 APPROVED January 1, 2015  
 ENGINEER OF OPERATIONS  
 APPROVED January 1, 2015  
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**TYPICAL PAVEMENT MARKINGS**  
 (Sheet 2 of 3)  
**STANDARD 780001-05**



**LANE-REDUCTION ARROW**

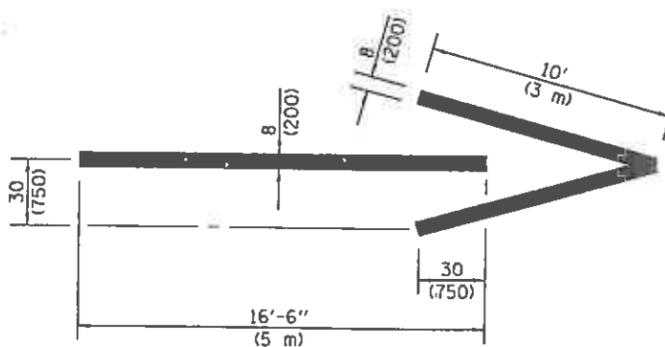
Right lane-reduction arrow shown.  
Use mirror image for left lane.



20' (6 m): urban  
50' (15 m): rural  
(Between arrow  
and word or  
between words)



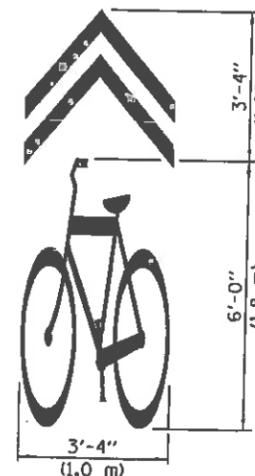
**WORD AND ARROW LAYOUT**



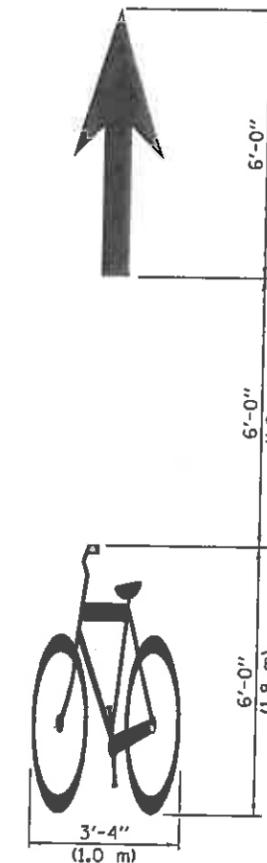
**WRONG WAY ARROW**



**INTERNATIONAL  
SYMBOL OF  
ACCESSIBILITY**



**SHARED LANE  
SYMBOL**



**BIKE SYMBOL**  
(Arrow is optional.)

Illinois Department of Transportation  
APPROVED January 1, 2015  
ENGINEER OF OPERATIONS  
APPROVED January 1, 2015  
ENGINEER OF DESIGN AND ENVIRONMENT  
ISSUED 1-1-87

**TYPICAL PAVEMENT  
MARKINGS**  
(Sheet 3 of 3)  
**STANDARD 780001-05**

# Du Page County Prevailing Wage for July 2015

(See explanation of column headings at bottom of wages)

Trade Name	RG	TYP	C	Base	FRMAN	M-F>8	OSA	OSH	H/W	Pensn	Vac	Trng		
ASBESTOS ABT-GEN		ALL		39.400	39.950	1.5	1.5	2.0	13.98	10.72	0.000	0.500		
ASBESTOS ABT-MEC		BLD		36.340	38.840	1.5	1.5	2.0	11.47	10.96	0.000	0.720		
BOILERMAKER		BLD		47.070	51.300	2.0	2.0	2.0	6.970	18.13	0.000	1.030		
BRICK MASON		BLD		43.780	48.160	1.5	1.5	2.0	10.05	14.43	0.000	0.400		
CARPENTER		ALL		44.350	46.350	1.5	1.5	2.0	11.79	16.39	0.000	0.630		
CEMENT MASON		ALL		43.750	45.750	2.0	1.5	2.0	13.05	14.45	0.000	0.480		
CERAMIC TILE FNSHER		BLD		36.810	0.000	1.5	1.5	2.0	10.55	9.230	0.000	0.770		
COMMUNICATION TECH		BLD		32.650	34.750	1.5	1.5	2.0	9.550	15.16	1.250	0.610		
ELECTRIC PWR EQMT OP		ALL		37.890	51.480	1.5	1.5	2.0	5.000	11.75	0.000	0.380		
ELECTRIC PWR EQMT OP		HWY		39.220	53.290	1.5	1.5	2.0	5.000	12.17	0.000	0.390		
ELECTRIC PWR GRNDMAN		ALL		29.300	51.480	1.5	1.5	2.0	5.000	9.090	0.000	0.290		
ELECTRIC PWR GRNDMAN		HWY		30.330	53.290	1.5	1.5	2.0	5.000	9.400	0.000	0.300		
ELECTRIC PWR LINEMAN		ALL		45.360	51.480	1.5	1.5	2.0	5.000	14.06	0.000	0.450		
ELECTRIC PWR LINEMAN		HWY		46.950	53.290	1.5	1.5	2.0	5.000	14.56	0.000	0.470		
ELECTRIC PWR TRK DRV		ALL		30.340	51.480	1.5	1.5	2.0	5.000	9.400	0.000	0.300		
ELECTRIC PWR TRK DRV		HWY		31.400	53.290	1.5	1.5	2.0	5.000	9.730	0.000	0.310		
ELECTRICIAN		BLD		38.160	41.980	1.5	1.5	2.0	9.550	18.29	4.680	0.680		
ELEVATOR CONSTRUCTOR		BLD		50.800	57.150	2.0	2.0	2.0	13.57	14.21	4.060	0.600		
FENCE ERECTOR	NE	ALL		37.340	39.340	1.5	1.5	2.0	13.05	12.06	0.000	0.300		
FENCE ERECTOR	W	ALL		45.060	48.660	2.0	2.0	2.0	10.52	20.76	0.000	0.700		
GLAZIER		BLD		40.500	42.000	1.5	2.0	2.0	13.14	16.99	0.000	0.940		
HT/FROST INSULATOR		BLD		48.450	50.950	1.5	1.5	2.0	11.47	12.16	0.000	0.720		
IRON WORKER	E	ALL		44.200	46.200	2.0	2.0	2.0	13.65	21.14	0.000	0.350		
IRON WORKER	W	ALL		45.060	48.660	2.0	2.0	2.0	10.52	20.76	0.000	0.700		
LABORER		ALL		39.200	39.950	1.5	1.5	2.0	13.98	10.72	0.000	0.500		
LATHER		ALL		44.350	46.350	1.5	1.5	2.0	11.79	16.39	0.000	0.630		
MACHINIST		BLD		45.350	47.850	1.5	1.5	2.0	7.260	8.950	1.850	0.000		
MARBLE FINISHERS		ALL		32.400	34.320	1.5	1.5	2.0	10.05	13.75	0.000	0.620		
MARBLE MASON		BLD		43.030	47.330	1.5	1.5	2.0	10.05	14.10	0.000	0.780		
MATERIAL TESTER I		ALL		29.200	0.000	1.5	1.5	2.0	13.98	10.72	0.000	0.500		
MATERIALS TESTER II		ALL		34.200	0.000	1.5	1.5	2.0	13.98	10.72	0.000	0.500		
MILLWRIGHT		ALL		44.350	46.350	1.5	1.5	2.0	11.79	16.39	0.000	0.630		
OPERATING ENGINEER		BLD 1		48.100	52.100	2.0	2.0	2.0	17.55	12.65	1.900	1.250		
OPERATING ENGINEER		BLD 2		46.800	52.100	2.0	2.0	2.0	17.55	12.65	1.900	1.250		
OPERATING ENGINEER		BLD 3		44.250	52.100	2.0	2.0	2.0	17.55	12.65	1.900	1.250		
OPERATING ENGINEER		BLD 4		42.500	52.100	2.0	2.0	2.0	17.55	12.65	1.900	1.250		
OPERATING ENGINEER		BLD 5		51.850	52.100	2.0	2.0	2.0	17.55	12.65	1.900	1.250		
OPERATING ENGINEER		BLD 6		49.100	52.100	2.0	2.0	2.0	17.55	12.65	1.900	1.250		
OPERATING ENGINEER		BLD 7		51.100	52.100	2.0	2.0	2.0	17.55	12.65	1.900	1.250		
OPERATING ENGINEER		FLT		36.000	36.000	1.5	1.5	2.0	17.10	11.80	1.900	1.250		
OPERATING ENGINEER		HWY 1		46.300	50.300	1.5	1.5	2.0	17.55	12.65	1.900	1.250		
OPERATING ENGINEER		HWY 2		45.750	50.300	1.5	1.5	2.0	17.55	12.65	1.900	1.250		
OPERATING ENGINEER		HWY 3		43.700	50.300	1.5	1.5	2.0	17.55	12.65	1.900	1.250		
OPERATING ENGINEER		HWY 4		42.300	50.300	1.5	1.5	2.0	17.55	12.65	1.900	1.250		
OPERATING ENGINEER		HWY 5		41.100	50.300	1.5	1.5	2.0	17.55	12.65	1.900	1.250		
OPERATING ENGINEER		HWY 6		49.300	50.300	1.5	1.5	2.0	17.55	12.65	1.900	1.250		
OPERATING ENGINEER		HWY 7		47.300	50.300	1.5	1.5	2.0	17.55	12.65	1.900	1.250		
ORNAMNTL IRON WORKER E		ALL		45.000	47.500	2.0	2.0	2.0	13.55	17.94	0.000	0.650		
ORNAMNTL IRON WORKER W		ALL		45.060	48.660	2.0	2.0	2.0	10.52	20.76	0.000	0.700		
PAINTER		ALL		41.730	43.730	1.5	1.5	1.5	10.30	8.200	0.000	1.350		
PAINTER SIGNS		BLD		33.920	38.090	1.5	1.5	1.5	2.600	2.710	0.000	0.000		
PILEDRIVER		ALL		44.350	46.350	1.5	1.5	2.0	11.79	16.39	0.000	0.630		
PIPEFITTER		BLD		46.000	49.000	1.5	1.5	2.0	9.000	15.85	0.000	1.780		
PLASTERER		BLD		43.430	46.040	1.5	1.5	2.0	10.05	14.43	0.000	1.020		
PLUMBER		BLD		46.650	48.650	1.5	1.5	2.0	13.18	11.46	0.000	0.880		
ROOFER		BLD		41.000	44.000	1.5	1.5	2.0	8.280	10.54	0.000	0.530		
SHEETMETAL WORKER		BLD		44.720	46.720	1.5	1.5	2.0	10.65	13.31	0.000	0.820		
SPRINKLER FITTER		BLD		49.200	51.200	1.5	1.5	2.0	11.75	9.650	0.000	0.550		
STEEL ERECTOR	E	ALL		42.070	44.070	2.0	2.0	2.0	13.45	19.59	0.000	0.350		
STEEL ERECTOR	W	ALL		45.060	48.660	2.0	2.0	2.0	10.52	20.76	0.000	0.700		
STONE MASON		BLD		43.780	48.160	1.5	1.5	2.0	10.05	14.43	0.000	1.030		
SURVEY WORKER		NOT IN EFFECT			ALL	37.000	37.750	1.5	1.5	2.0	12.97	9.930	0.000	0.500
TERRAZZO FINISHER		BLD		38.040	0.000	1.5	1.5	2.0	10.55	11.22	0.000	0.720		
TERRAZZO MASON		BLD		41.880	44.880	1.5	1.5	2.0	10.55	12.51	0.000	0.940		

TILE MASON	BLD	43.840	47.840	1.5	1.5	2.0	10.55	11.40	0.000	0.990
TRAFFIC SAFETY WRKR	HWY	32.750	34.350	1.5	1.5	2.0	6.550	6.450	0.000	0.500
TRUCK DRIVER	ALL 1	35.920	36.120	1.5	1.5	2.0	8.280	8.760	0.000	0.150
TRUCK DRIVER	ALL 2	32.700	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.150
TRUCK DRIVER	ALL 3	32.900	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.150
TRUCK DRIVER	ALL 4	33.100	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.150
TUCKPOINTER	BLD	42.620	43.620	1.5	1.5	2.0	10.05	13.34	0.000	0.670

Legend: RG (Region)  
 TYP (Trade Type - All, Highway, Building, Floating, Oil & Chip, Rivers)  
 C (Class)  
 Base (Base Wage Rate)  
 FRMAN (Foreman Rate)  
 M-P>8 (OT required for any hour greater than 8 worked each day, Mon through Fri.  
 OSA (Overtime (OT) is required for every hour worked on Saturday)  
 OSH (Overtime is required for every hour worked on Sunday and Holidays)  
 H/W (Health & Welfare Insurance)  
 Pensn (Pension)  
 Vac (Vacation)  
 Trng (Training)

## Explanations

### DUPAGE COUNTY

IRON WORKERS AND FENCE ERECTOR (WEST) - West of Route 53.

The following list is considered as those days for which holiday rates of wages for work performed apply: New Years Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day and Veterans Day in some classifications/counties. Generally, any of these holidays which fall on a Sunday is celebrated on the following Monday. This then makes work performed on that Monday payable at the appropriate overtime rate for holiday pay. Common practice in a given local may alter certain days of celebration. If in doubt, please check with IDOL.

### EXPLANATION OF CLASSES

ASBESTOS - GENERAL - removal of asbestos material/mold and hazardous materials from any place in a building, including mechanical systems where those mechanical systems are to be removed. This includes the removal of asbestos materials/mold and hazardous materials from ductwork or pipes in a building when the building is to be demolished at the time or at some close future date.

ASBESTOS - MECHANICAL - removal of asbestos material from mechanical systems, such as pipes, ducts, and boilers, where the mechanical systems are to remain.

TRAFFIC SAFETY - work associated with barricades, horses and drums used to reduce lane usage on highway work, the installation and removal of temporary lane markings, and the installation and removal of temporary road signs.

### CERAMIC TILE FINISHER

The grouting, cleaning, and polishing of all classes of tile, whether for interior or exterior purposes, all burned, glazed or unglazed products; all composition materials, granite tiles, warning detectable tiles, cement tiles, epoxy composite materials, pavers, glass, mosaics, fiberglass, and all substitute materials, for tile made in tile-like units; all mixtures in tile like form of cement, metals, and other materials that are for and intended for use as a finished floor surface, stair treads, promenade roofs, walks, walls, ceilings, swimming pools, and all other places where tile is to form a finished interior or exterior. The mixing of all setting mortars including but not limited to thin-set mortars, epoxies, wall mud, and any other sand and cement mixtures or adhesives when used in the preparation, installation, repair, or maintenance of tile and/or similar materials. The handling and unloading of all sand, cement, lime, tile, fixtures, equipment, adhesives, or any other materials to be used in the preparation, installation, repair, or maintenance of tile and/or similar materials. Ceramic Tile Finishers shall fill all joints and voids regardless of method on all tile work, particularly and especially after installation of said tile work. Application of any and all protective coverings to all types of tile installations including, but not be limited to, all soap compounds, paper products, tapes, and all polyethylene coverings, plywood, masonite, cardboard, and any new type of products that may be used to protect tile installations, Blastrac equipment, and all floor scarifying equipment used in preparing floors to receive tile. The clean up and removal of all waste and materials. All demolition of existing tile floors and walls to be re-tiled.

## COMMUNICATIONS TECHNICIAN

Low voltage installation, maintenance and removal of telecommunication facilities (voice, sound, data and video) including telephone and data inside wire, interconnect, terminal equipment, central offices, FIBER, fiber optic cable and equipment, micro waves, V-SAT, bypass, CATV, WAN (wide area networks), LAN (local area networks), and ISDN (integrated system digital network), pulling of wire in raceways, but not the installation of raceways.

## MARBLE FINISHER

Loading and unloading trucks, distribution of all materials (all stone, sand, etc.), stocking of floors with material, performing all rigging for heavy work, the handling of all material that may be needed for the installation of such materials, building of scaffolding, polishing if needed, patching, waxing of material if damaged, pointing up, caulking, grouting and cleaning of marble, holding water on diamond or Carborundum blade or saw for setters cutting, use of tub saw or any other saw needed for preparation of material, drilling of holes for wires that anchor material set by setters, mixing up of molding plaster for installation of material, mixing up thin set for the installation of material, mixing up of sand to cement for the installation of material and such other work as may be required in helping a Marble Setter in the handling of all material in the erection or installation of interior marble, slate, travertine, art marble, serpentine, alberene stone, blue stone, granite and other stones (meaning as to stone any foreign or domestic materials as are specified and used in building interiors and exteriors and customarily known as stone in the trade), carrara, sanionyx, vitrolite and similar opaque glass and the laying of all marble tile, terrazzo tile, slate tile and precast tile, steps, risers treads, base, or any other materials that may be used as substitutes for any of the aforementioned materials and which are used on interior and exterior which are installed in a similar manner.

MATERIAL TESTER I: Hand coring and drilling for testing of materials; field inspection of uncured concrete and asphalt.

MATERIAL TESTER II: Field inspection of welds, structural steel, fireproofing, masonry, scil, facade, reinforcing steel, formwork, cured concrete, and concrete and asphalt batch plants; adjusting proportions of bituminous mixtures.

## OPERATING ENGINEER - BUILDING

Class 1. Asphalt Plant; Asphalt Spreader; Autograde; Backhoes with Caisson Attachment; Batch Plant; Benoto (requires Two Engineers); Boiler and Throttle Valve; Caisson Rigs; Central Redi-Mix Plant; Combination Back Hoe Front End-loader Machine; Compressor and Throttle Valve; Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Conveyor (Truck Mounted); Concrete Paver Over 27E cu. ft; Concrete Paver 27E cu. ft. and Under; Concrete Placer; Concrete Placing Boom; Concrete Pump (Truck Mounted); Concrete Tower; Cranes, All; Cranes, Hammerhead; Cranes, (GCI and similar Type); Creter Crane; Spider Crane; Crusher, Stone, etc.; Derricks, All; Derricks, Traveling; Formless Curb and Gutter Machine; Grader, Elevating; Grouting Machines; Heavy Duty Self-Propelled Transporter or Prime Mover; Highlift Shovels or Front Endloader 2-1/4 yd. and over; Hoists, Elevators, outside type rack and pinion and similar machines; Hoists, One, Two and Three Drum; Hoists, Two Tugger One Floor; Hydraulic Backhoes; Hydraulic Boom Trucks; Hydro Vac (and similar equipment); Locomotives, All; Motor Patrol; Lubrication Technician; Manipulators; Pile Drivers and Skid Rig; Post Hole Digger; Pre-Stress Machine; Pump Cretes Dual Ram; Pump Cretes: Squeeze Cretes-Screw Type Pumps; Gypsum Bulker and Pump; Raised and Blind Hole Drill; Roto Mill Grinder; Scoops - Tractor Drawn; Slip-Form Paver; Straddle Buggies; Operation of Tie Back Machine; Tournapull; Tractor with Boom and Side Boom; Trenching Machines.

Class 2. Boilers; Broom, All Power Propelled; Bulldozers; Concrete Mixer (Two Bag and Over); Conveyor, Portable; Forklift Trucks; Highlift Shovels or Front Endloaders under 2-1/4 yd.; Hoists, Automatic; Hoists, Inside Elevators; Hoists, Sewer Dragging Machine; Hoists, Tugger Single Drum; Laser Screed; Rock Drill (Self-Propelled); Rock Drill (Truck Mounted); Rollers, All; Steam Generators; Tractors, All; Tractor Drawn Vibratory Roller; Winch Trucks with "A" Frame.

Class 3. Air Compressor; Combination Small Equipment Operator; Generators; Heaters, Mechanical; Hoists, Inside Elevators (remodeling or renovation work); Hydraulic Power Units (Pile Driving, Extracting, and Drilling); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Low Boys; Pumps, Well Points; Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.

Class 4. Bobcats and/or other Skid Steer Loaders; Oilers; and Brick Forklift.

Class 5. Assistant Craft Foreman.

Class 6. Gradall.

Class 7. Mechanics; Welders.

#### OPERATING ENGINEERS - HIGHWAY CONSTRUCTION

Class 1. Asphalt Plant; Asphalt Heater and Planer Combination; Asphalt Heater Scarfire; Asphalt Spreader; Autograder/GOMACO or other similar type machines; ABG Paver; Backhoes with Caisson Attachment; Ballast Regulator; Belt Loader; Caisson Rigs; Car Dumper; Central Redi-Mix Plant; Combination Backhoe Front Endloader Machine, (1 cu. yd. Backhoe Bucket or over or with attachments); Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Paver over 27E cu. ft.; Concrete Placer; Concrete Tube Float; Cranes, all attachments; Cranes, Tower Cranes of all types; Creter Crane; Spider Crane; Crusher, Stone, etc.; Derricks, All; Derrick Boats; Derricks, Traveling; Dredges; Elevators, Outside type Rack & Pinion and Similar Machines; Formless Curb and Gutter Machine; Grader, Elevating; Grader, Motor Grader, Motor Patrol, Auto Patrol, Form Grader, Pull Grader, Subgrader; Guard Rail Post Driver Truck Mounted; Hoists, One, Two and Three Drum; Heavy Duty Self-Propelled Transporter or Prime Mover; Hydraulic Backhoes; Backhoes with shear attachments up to 40' of boom reach; Lubrication Technician; Manipulators; Mucking Machine; Pile Drivers and Skid Rig; Pre-Stress Machine; Pump Cretes Dual Ram; Rock Drill - Crawler or Skid Rig; Rock Drill - Truck Mounted; Rock/Track Tamper; Roto Mill Grinder; Slip-Form Paver; Snow Melters; Soil Test Drill Rig (Truck Mounted); Straddle Buggies; Hydraulic Telescoping Form (Tunnel); Operation of Tieback Machine; Tractor Drawn Belt Loader; Tractor Drawn Belt Loader (with attached pusher - two engineers); Tractor with Boom; Tractaire with Attachments; Traffic Barrier Transfer Machine; Trenching; Truck Mounted Concrete Pump with Boom; Raised or Blind Hole Drills (Tunnel Shaft); Underground Boring and/or Mining Machines 5 ft. in diameter and over tunnel, etc; Underground Boring and/or Mining Machines under 5 ft. in diameter; Wheel Excavator; Widener (APSCO).

Class 2. Batch Plant; Bituminous Mixer; Boiler and Throttle Valve; Bulldozers; Car Loader Trailing Conveyors; Combination Backhoe Front Endloader Machine (Less than 1 cu. yd. Backhoe Bucket or over or with attachments); Compressor and Throttle Valve; Compressor, Common Receiver (3); Concrete Breaker or Hydro Hammer; Concrete Grinding Machine; Concrete Mixer or Paver 7S Series to and including 27 cu. ft.; Concrete Spreader; Concrete Curing Machine, Burlap Machine, Belting Machine and Sealing Machine; Concrete Wheel Saw; Conveyor Muck Cars (Haglund or Similar Type); Drills, All; Finishing Machine - Concrete; Highlift Shovels or Front Endloader; Hoist - Sewer Dragging Machine; Hydraulic Boom Trucks (All Attachments); Hydro-Blaster; Hydro Excavating (excluding hose work); Laser Screed; All Locomotives, Dinky; Off-Road Hauling Units (including articulating) Non Self-Loading Ejection Dump; Pump Cretes: Squeeze Cretes - Screw Type Pumps, Gypsum Bulker and Pump; Roller, Asphalt; Rotary Snow Plows; Rototiller, Seaman, etc., self-propelled; Self-Propelled Compactor; Spreader - Chip - Stone, etc.; Scraper - Single/Twin Engine/Push and Pull; Scraper - Prime Mover in Tandem (Regardless of Size); Tractors pulling attachments, Sheeps Foot, Disc, Compactor, etc.; Tug Boats.

Class 3. Boilers; Brooms, All Power Propelled; Cement Supply Tender; Compressor, Common Receiver (2); Concrete Mixer (Two Bag and Over); Conveyor, Portable; Farm-Type Tractors Used for Mowing, Seeding, etc.; Forklift Trucks; Grouting Machine; Hoists, Automatic; Hoists, All Elevators; Hoists, Tugger Single Drum; Jeep Diggers; Low Boys; Pipe Jacking Machines; Post-Hole Digger; Power Saw, Concrete Power Driven; Pug Mills; Rollers, other than Asphalt; Seed and Straw Blower; Steam Generators; Stump Machine; Winch Trucks with "A" Frame; Work Boats; Tamper-Form-Motor Driven.

Class 4. Air Compressor; Combination - Small Equipment Operator; Directional Boring Machine; Generators; Heaters, Mechanical; Hydraulic Power Unit (Pile Driving, Extracting, or Drilling); Light Plants, All (1 through 5); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Pumps, Well Points; Vacuum Trucks (excluding hose work); Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.

Class 5. SkidSteer Loader (all); Brick Forklifts; Oilers.

Class 6. Field Mechanics and Field Welders

Class 7. Dowell Machine with Air Compressor; Gradall and machines of like nature.

#### OPERATING ENGINEER - FLOATING

Diver. Diver Wet Tender, Diver Tender, ROV Pilot, ROV Tender

SURVEY WORKER - Operated survey equipment including data collectors, G.P.S. and robotic instruments, as well as conventional levels and transits.

#### TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION

Class 1. Two or three Axle Trucks. A-frame Truck when used for transportation purposes; Air Compressors and Welding Machines, including those pulled by cars, pick-up trucks and tractors; Ambulances; Batch Gate Lockers; Batch Hopperman; Car and Truck Washers; Carry-alls; Fork Lifts and Hoisters; Helpers; Mechanics; Helpers and Greasers; Oil Distributors 2-man operation; Pavement Breakers; Pole Trailer, up to 40 feet; Power Mower Tractors; Self-propelled Chip Spreader; Skipman; Slurry Trucks, 2-man operation; Slurry Truck Conveyor Operation, 2 or 3 man; Teamsters; Unskilled Dumpman; and Truck Drivers hauling warning lights, barricades, and portable toilets on the job site.

Class 2. Four axle trucks; Dump Crets and Adgetors under 7 yards; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnapulls or Turntrailers when pulling other than self-loading equipment or similar equipment under 16 cubic yards; Mixer Trucks under 7 yards; Ready-mix Plant Hopper Operator, and Winch Trucks, 2 Axles.

Class 3. Five axle trucks; Dump Crets and Adgetors 7 yards and over; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turntrailers or turnapulls when pulling other than self-loading equipment or similar equipment over 16 cubic yards; Explosives and/or Fission Material Trucks; Mixer Trucks 7 yards or over; Mobile Cranes while in transit; Oil Distributors, 1-man operation; Pole Trailer, over 40 feet; Pole and Expandable Trailers hauling material over 50 feet long; Slurry trucks, 1-man operation; Winch trucks, 3 axles or more; Mechanic--Truck Welder and Truck Painter.

Class 4. Six axle trucks; Dual-purpose vehicles, such as mounted crane trucks with hoist and accessories; Foreman; Master Mechanic; Self-loading equipment like P.B. and trucks with scoops on the front.

#### TERRAZZO FINISHER

The handling of sand, cement, marble chips, and all other materials that may be used by the Mosaic Terrazzo Mechanic, and the mixing, grinding, grouting, cleaning and sealing of all Marble, Mosaic, and Terrazzo work, floors, base, stairs, and wainscoting by hand or machine, and in addition, assisting and aiding Marble, Masonic, and Terrazzo Mechanics.

#### Other Classifications of Work:

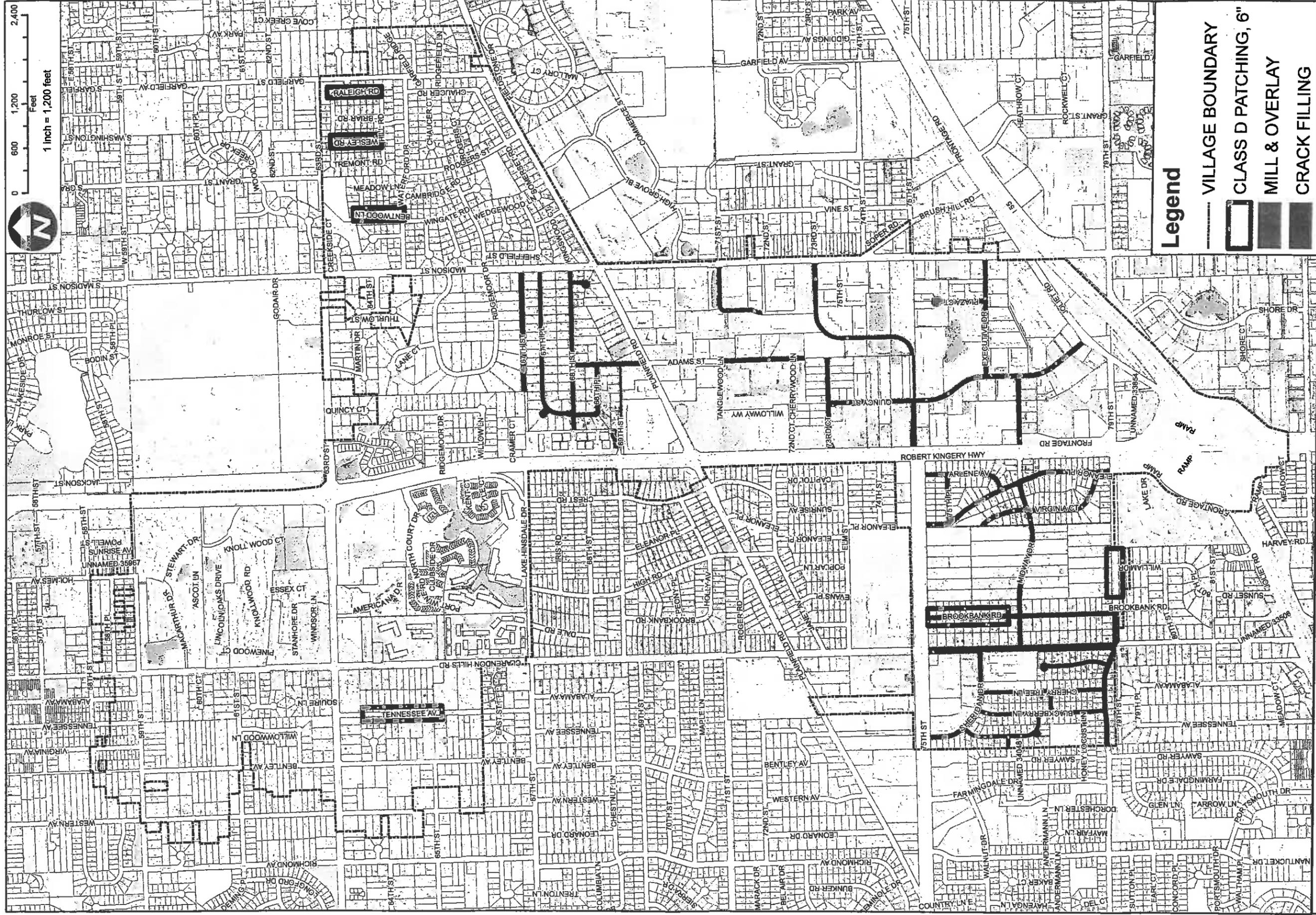
For definitions of classifications not otherwise set out, the Department generally has on file such definitions which are available. If a task to be performed is not subject to one of the classifications of pay set out, the Department will upon being contacted state which neighboring county has such a classification and provide such rate, such rate being deemed to exist by reference in this document. If no neighboring county rate applies to the task, the Department shall undertake a special determination, such special determination being then deemed to have existed under this determination. If a project requires these, or any classification not listed, please contact IDOL at 217-782-1710 for wage rates or clarifications.

#### LANDSCAPING

Landscaping work falls under the existing classifications for laborer, operating engineer and truck driver. The work performed by landscape plantsman and landscape laborer is covered by the existing classification of laborer. The work performed by landscape operators (regardless of equipment used or its size) is covered by the classifications of operating engineer. The work performed by landscape truck drivers (regardless of size of truck driven) is covered by the classifications of truck driver.

#### MATERIAL TESTER & MATERIAL TESTER/INSPECTOR I AND II

Notwithstanding the difference in the classification title, the classification entitled "Material Tester I" involves the same job duties as the classification entitled "Material Tester/Inspector I". Likewise, the classification entitled "Material Tester II" involves the same job duties as the classification entitled "Material Tester/Inspector II".



Map Document: (N:\WILLOWBROOK\90144H124\paving limits.mxd) 2/15/2010 - 11:25:55 AM

**Legend**

- VILLAGE BOUNDARY
- CLASS D PATCHING, 6"
- MILL & OVERLAY
- CRACK FILLING

CLIENT: **VILLAGE OF WILLOWBROOK**

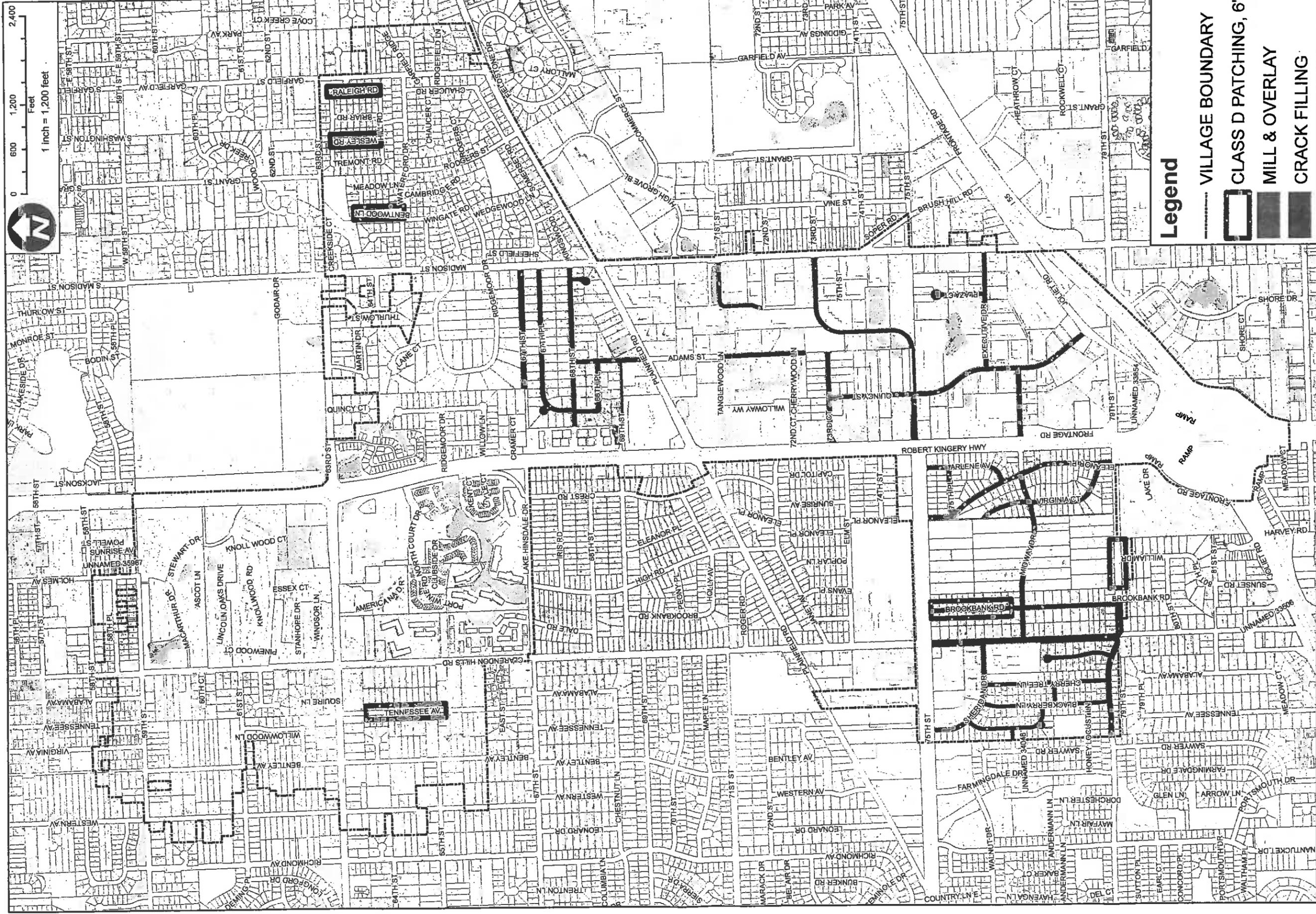
TITLE: **2016 PAVING LIMITS  
BASE BID**

PROJ. NO. 90144.H181  
DATE: 05-12-16  
SHEET 1 OF 1  
DRAWING NO.

DSGN.	SCALE:	1"=1,400'
DWN.	GIS USER	MHAYES
CHKD.	PLOT DATE	
FILE:		

CHRISTOPHER B. BURKE ENGINEERING, LTD.  
9575 W. Higgins Road, Suite 600 - Rosemont, Illinois 60018 - (847) 823-0500

**EXH 1**



**Legend**

- VILLAGE BOUNDARY
- CLASS D PATCHING, 6"
- MILL & OVERLAY
- CRACK FILLING

CLIENT: **VILLAGE OF WILLOWBROOK**

TITLE: **2016 PAVING LIMITS  
ALTERNATE BID**

PROJ. NO. 90144.H181

DATE: 05-12-16

SHEET 1 OF 1

DRAWING NO.

DSGN.	SCALE:	1" = 1,400'
DWN.	GIS USER	MHAYES
CHKD.	PLOT DATE	
FILE:		

**CHRISTOPHER B. BURKE ENGINEERING, LTD**  
 9575 W. Higgins Road, Suite 600 · Rosemont, Illinois 60018 · (847) 823-0500

**EXH 2**



EST. 1960

# Willowbrook

835 Midway Drive  
Willowbrook, IL 60527-5549

Phone: (630) 323-8215 Fax: (630) 323-0787 www.willowbrookil.org

**Mayor**

Frank A. Trilla

**Village Clerk**

Leroy R. Hansen

**Village Trustees**

Sue Berglund

Umberto Davi

Terrence Kelly

Michael Mistele

Gayle Neal

Paul Oggerino

**Village Administrator**

Tim Halik

**Chief of Police**

Mark Shelton

**Director of Finance**

Carrie Dittman

MONTHLY REPORT  
MUNICIPAL SERVICES DEPARTMENT  
Permits issued for the month of May, 2016

Charging Station	1
Commercial Occupancy	2
Concrete Replacement	2
Deck	1
Door Replacement	3
Driveway Replacement	9
Elevator Modification	1
Fence	2
Generator	1
Grading	1
Interior Build Out	1
Lawn Sprinkler	1
Plumbing Repair	1
Reoccupancy	1
Roof	5
Security System	2
Sign	1
Temporary Event	1
Window Replacement	3
<b>TOTAL</b>	<b>39</b>
Final Certificates of Occupancy	3
Temporary Certificates of Occupancy	0
Permit Revenue for May, 2016	28,379.31
Total Revenue Collected for Fiscal Year To Date	28,379.31
Total Budgeted for Fiscal Year 2016/17	232,500.00
Total Percentage of Budgeted Revenue Collected to Date	12.21

Respectfully submitted,

Timothy Halik  
Village Administrator

TH/jp



Proud Member of the  
Illinois Route 66 Scenic Byway

MUNICIPAL SERVICES DEPARTMENT

PERMIT REVENUE

Fiscal Year 2016/17

MONTH	CURRENT FISCAL YEAR	PRIOR FISCAL YEAR
MAY	\$ 28,379.31	\$ 11,447.58
JUNE		\$ 21,083.13
JULY		\$ 19,426.58
AUGUST		\$ 15,150.56
SEPTEMBER		\$ 146,015.93
OCTOBER		\$ 24,175.36
NOVEMBER		\$ 39,743.04
DECEMBER		\$ 15,692.73
JANUARY		\$ 9,450.41
FEBRUARY		\$ 9,393.21
MARCH		\$ 32,001.35
APRIL		\$ 25,586.99
COLLECTED REVENUE	\$ 28,379.31	\$ 369,166.87
BUDGETED REVENUE	\$ 232,500.00	\$ 200,000.00
REVENUES COLLECTED- (OVER)/UNDER BUDGET	\$ 204,120.69	(169,446.87)
PERCENTAGE OF BUDGETED REVENUE COLLECTED	12.21%	184.72

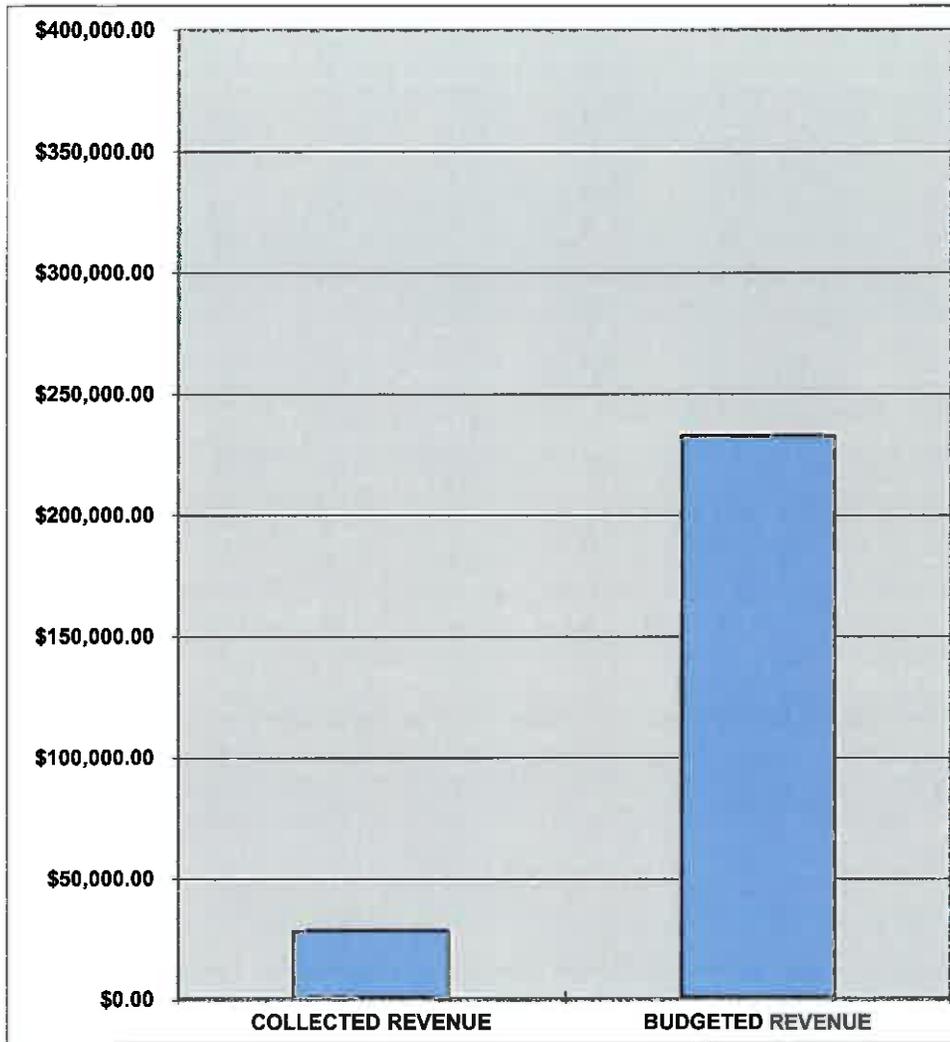
# MUNICIPAL SERVICES DEPARTMENT

## PERMIT REVENUE

	Fiscal Year 16/17	Fiscal Year 15/16
COLLECTED REVENUE	\$ 28,379.31	\$ 369,446.87
BUDGETED REVENUE	\$ 232,500.00	\$ 200,000.00

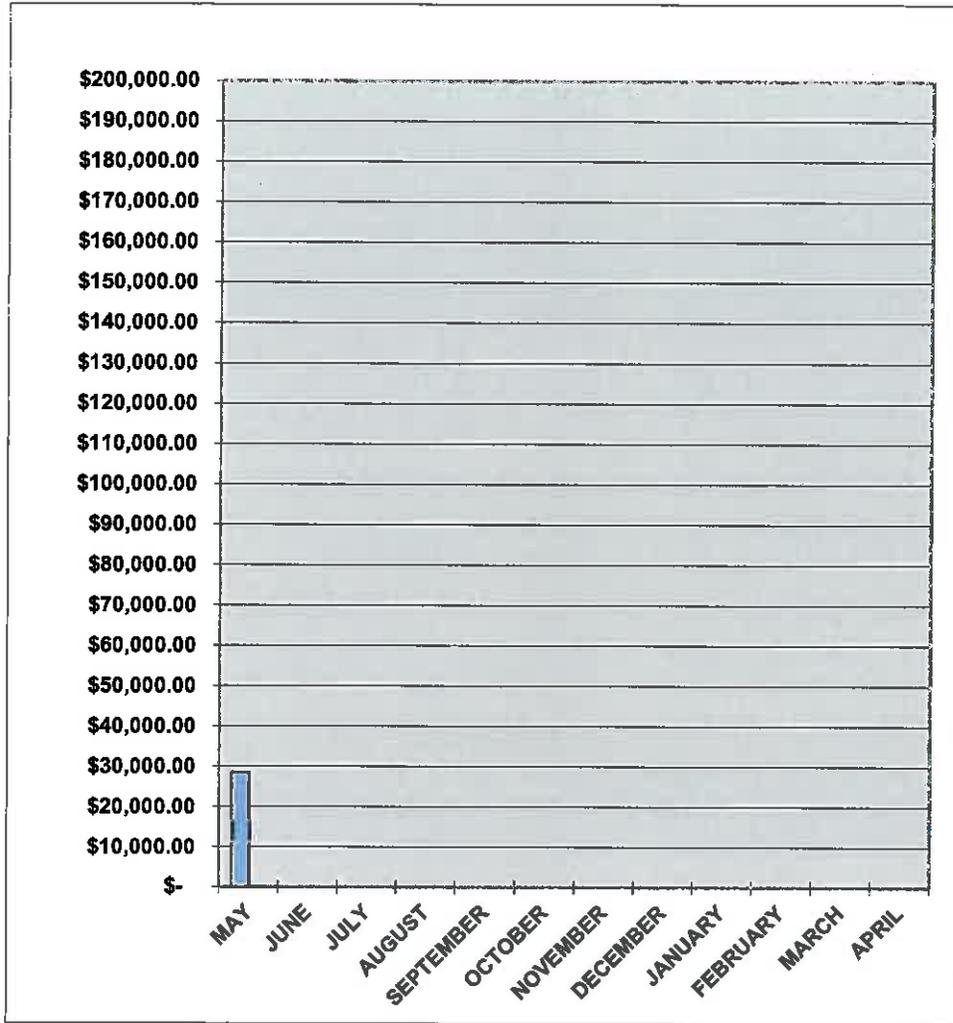
# MUNICIPAL SERVICES DEPARTMENT

## PERMIT REVENUE



# MUNICIPAL SERVICES DEPARTMENT

## PERMIT REVENUE



Permit	Date Issued:	Name:	Address:	Permit Purpose:	Business Name:	Fee:	RES / COMM:	Date Released:
16-096	05/24/16	Hinsdale Lake Comm	6300 Kingery Hwy	Charging Station	Whole Foods	\$ 1,702.05	C	05/24/16
16-129	05/17/16	Mark Konieczka	650 Willowbrook Center	Commercial Occup.	Grass On	\$ 200.00	C	05/17/16
16-134	05/17/16	Alan Thom	650 Willowbrook Center	Commercial Occup.	Personal Storage	\$ 200.00	C	05/17/16
16-138	05/23/16	Robert Brindac	5940 Bentley Ave	Concrete Replacement		\$ 75.00	R	05/23/16
16-139	05/24/16	Jeff Marek	6129 Willowood	Concrete Replacement		\$ 75.00	R	05/24/16
16-079	05/03/16	Michael Houlihan	19 Kane Court	Deck		\$ 50.00	R	05/03/16
16-119	05/06/16	JoAnne Fisher	6 Clubhouse Drive	Door Replacement		\$ 75.00	R	05/06/16
16-140	05/23/16	Gary Novatry	7631 Clarendon Hills	Door Replacement		\$ 75.00	R	05/23/16
16-136	05/23/16	Susan Fu	6105 Knoll Valley	Door Replacement		\$ 75.00	R	05/23/16
16-103	05/04/16	Ajay Nagarkatte	6120 Willowood Lane	Driveway Replacement		\$ 125.00	R	05/03/16
16-107	05/04/16	F. Wolicki	6712 Sheffield Lane	Driveway Replacement		\$ 125.00	R	05/03/16
16-106	05/04/16	G. Diggers	6232 Bentley	Driveway Replacement		\$ 75.00	R	05/03/16
16-122	05/08/16	Rick Townsend	5845 Tennessee Ave	Driveway Replacement		\$ 75.00	R	05/06/16
16-126	05/16/16	Barb Bencur	5807 Bentley Ave	Driveway Replacement		\$ 75.00	R	05/16/16
16-133	05/19/16	Keith Goss	5936 Bentley	Driveway Replacement		\$ 75.00	R	05/19/16
16-124	05/23/16	Coleen Blouin	309 Chataleine Ct	Driveway Replacement		\$ 75.00	R	05/23/16
16-131	05/23/16	Chris Zapka	232 Somerset Road	Driveway Replacement		\$ 75.00	R	05/23/16
16-101	05/24/16	Debbie Karnas	5860 Alabama Rd	Driveway Replacement		\$ 75.00	R	05/24/16
16-095	05/23/16	Mike Daum	619 Plainfield Road	Elevator Modification		\$ 275.00	R	05/23/16
16-117	05/05/16	Mark Astrella	7635 Eleanor Place	Fence		\$ 50.00	R	05/05/16
16-123	05/16/16	Kathy Plesha	368 63rd Street	Fence		\$ 50.00	R	05/16/16
16-116	05/16/16	Michael Piccatto	6137 Willowood	Generator		\$ 75.00	R	05/16/16
16-147	05/27/16	Ivan Colakovic	645 63rd Street	Grading		\$ 275.00	R	05/27/16
16-127	05/17/16	Regency Centers	6300 Kingery	Interior Build-Out	Tomato Bar	\$ 9,717.26	C	05/17/16
16-109	05/04/16	A. Gonzalez	650 Willowbrook Center	Lawn Sprinkler		\$ 125.00	R	05/03/16
	05/03/16	Peter Michael Realty	840 Plainfield	Plan Review	Pete's Fresh Market	\$ 6,000.00	C	05/03/16
	05/03/16	Peter Michael Realty	840 Plainfield	Plan Review	Pete's Fresh Market	\$ 6,000.00	C	05/03/16
16-170	05/31/16	Jamie Ballesteros	520 Ridgemoor Drive	Plumbing Repair		\$ 50.00	R	05/31/16
16-121	05/27/16	Jill Bonfiglio	7670 Plaza	Reoccupancy	Ablenet	\$ 200.00	C	05/27/16
16-114	05/03/16	Gary Leaf	56 Garfield Ridge Ct	Roof		\$ 35.00	R	05/03/16
16-113	05/04/16	Nancy Baker	815 72nd Ct	Roof		\$ 35.00	R	05/03/16
16-110	05/04/16	Merle Lewis	732 75t Street	Roof		\$ 35.00	R	05/03/16
16-116	05/05/16	J. Collins	6811 Caitlin Ct.	Roof		\$ 35.00	R	05/05/16
16-141	05/24/16	Michael Ables	430 Ridgemoor	Roof		\$ 35.00	R	05/24/16
16-142	05/23/16	Lois Dick	40 Kule Court	Security System		\$ 50.00	R	05/23/16
16-146	05/25/16	John Mullarkey	359 Stonegate	Security System		\$ 50.00	R	05/25/16
16-130	05/27/16	David Hrizak	650 Willowbrook Center	Sign	Willowbrook Bus. Ctr	\$ 325.35	C	05/27/16
16-115	05/16/16	Little Sunshine	6258 Kingery	Temporary Event	Little Sunshine	\$ 100.00	C	05/16/16
16-118	05/16/16	Keith Price	2 Kyle Court	Window Replacement		\$ 75.00	R	05/16/16
16-137	05/23/16	Solia Velasco	6701 Sheffield Lane	Window Replacement		\$ 75.00	R	05/23/16

Permit	Date Issued:	Name:	Address:	Permit Purpose:	Business Name:	Fee:	RES / COMM:	Date Released:
16-135	05/23/16	Peter Louise	7722 Clarendon Hills	Window Replacement		\$ 75.00	R	05/23/16

Date	JNL	Type	Description	Reference #	Debits	Credits	Balance
Fund 01 GENERAL FUND							
05/01/2016			01-00-310-401 BUILDING PERMITS		BEG. BALANCE		0.00
05/02/2016	CR	RCPT	Building Dept. Invoice 05/02/2016			325.00	(325.00)
05/03/2016	CR	RCPT	Building Dept. Invoice 05/03/2016			12,160.00	(12,485.00)
05/04/2016	CR	RCPT	Building Dept. Invoice 05/04/2016			120.00	(12,605.00)
05/06/2016	CR	RCPT	Building Dept. Invoice 05/06/2016			100.00	(12,705.00)
05/06/2016	CR	RCPT	Building Dept. Invoice 05/06/2016			50.00	(12,755.00)
05/10/2016	CR	RCPT	Building Dept. Invoice 05/10/2016			150.00	(12,905.00)
05/11/2016	CR	RCPT	Building Dept. Invoice 05/11/2016			4,150.00	(17,055.00)
05/11/2016	CR	RCPT	Building Dept. Invoice 05/11/2016			35.00	(17,090.00)
05/12/2016	CR	RCPT	Building Dept. Invoice 05/12/2016			75.00	(17,165.00)
05/16/2016	CR	RCPT	Building Dept. Invoice 05/16/2016			50.00	(17,215.00)
05/17/2016	CR	RCPT	Building Dept. Invoice 05/17/2016			9,194.31	(26,409.31)
05/18/2016	CR	RCPT	Building Dept. Invoice 05/18/2016			475.00	(26,884.31)
05/19/2016	CR	RCPT	Building Dept. Invoice 05/19/2016			150.00	(27,034.31)
05/19/2016	CR	RCPT	Building Dept. Invoice 05/19/2016			75.00	(27,109.31)
05/20/2016	CR	RCPT	Building Dept. Invoice 05/20/2016			225.00	(27,334.31)
05/23/2016	CR	RCPT	Building Dept. Invoice 05/23/2016			360.00	(27,694.31)
05/23/2016	CR	RCPT	Building Dept. Invoice 05/23/2016			75.00	(27,769.31)
05/24/2016	CR	RCPT	Building Dept. Invoice 05/24/2016			75.00	(27,844.31)
05/25/2016	CR	RCPT	Building Dept. Invoice 05/25/2016			50.00	(27,894.31)
05/26/2016	CR	RCPT	Building Dept. Invoice 05/26/2016			275.00	(28,169.31)
05/27/2016	CR	RCPT	Building Dept. Invoice 05/27/2016			100.00	(28,269.31)
05/31/2016	CR	RCPT	Building Dept. Invoice 05/31/2016			110.00	(28,379.31)
05/31/2016			01-00-310-401	END BALANCE	0.00	28,379.31	(28,379.31)

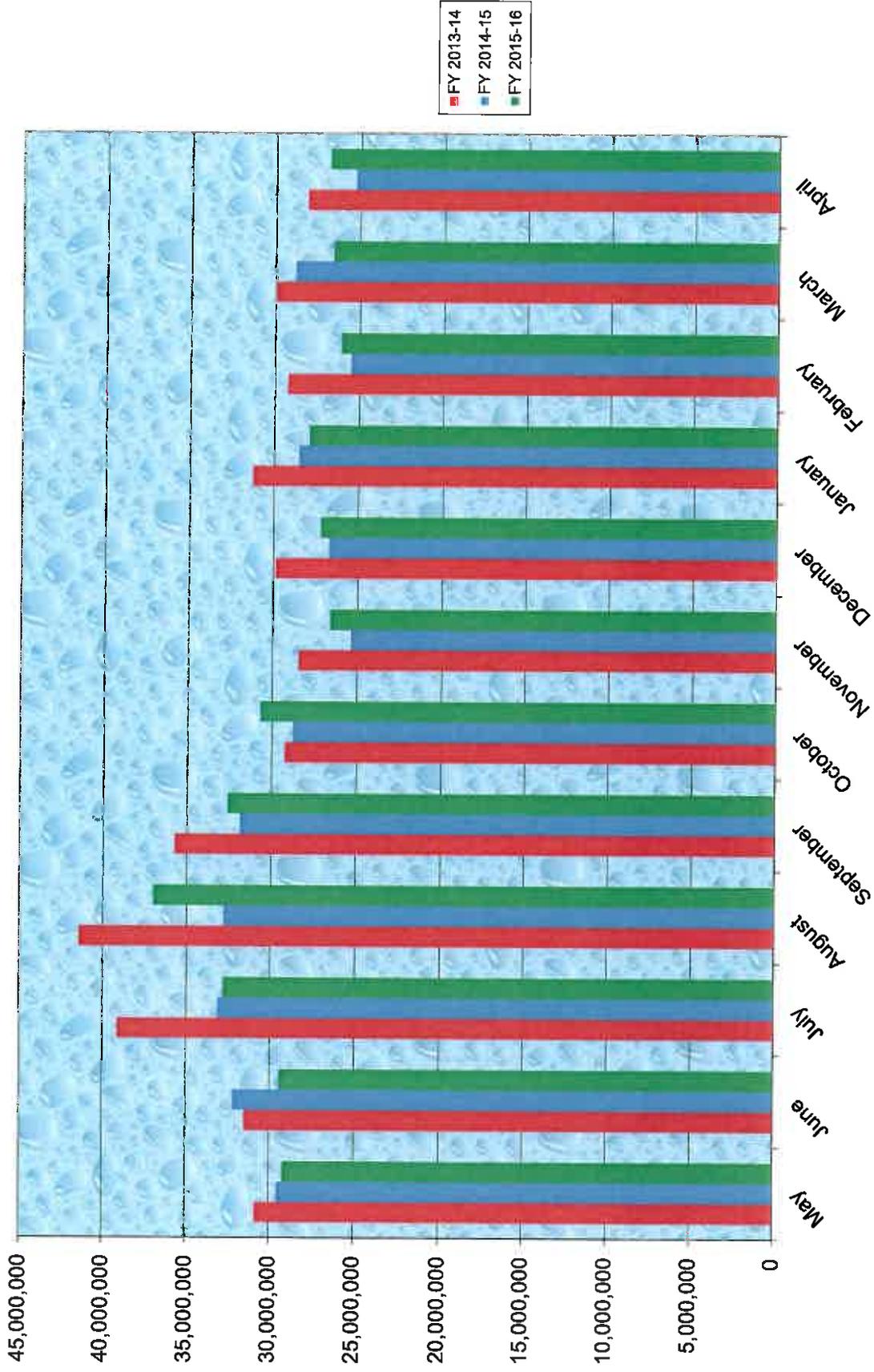
VILLAGE OF WILLOWBROOK - PUMPAGE REPORT  
TOTAL GALLONS PUMPED  
FY 2002/03 - FY 2015/16

Month	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
May	32,267,000	33,518,000	35,018,000	35,919,000	35,162,000	36,696,000	33,890,000	31,322,000	31,715,000	30,725,000	34,220,000	30,860,000	29,547,000	29,213,000
June	38,911,000	38,691,000	35,447,000	48,511,000	42,471,000	43,700,000	33,817,000	32,087,000	31,799,000	32,620,000	44,635,000	31,512,000	32,193,000	29,447,000
July	52,100,000	39,116,000	41,248,000	52,479,000	43,279,000	44,574,000	41,463,000	36,819,000	38,513,000	41,371,000	49,498,000	39,106,000	33,122,000	32,813,000
August	44,167,000	40,433,000	41,059,000	47,861,000	41,114,000	38,778,000	43,017,000	38,516,000	38,745,000	35,639,000	40,272,000	41,448,000	32,796,000	36,985,000
September	40,838,000	36,275,000	39,658,000	43,906,000	32,998,000	42,013,000	33,418,000	34,331,000	33,992,000	32,273,000	33,657,000	35,737,000	31,869,000	32,623,000
October	33,128,000	31,667,000	33,765,000	35,009,000	31,937,000	34,612,000	30,203,000	28,919,000	33,789,000	29,892,000	30,283,000	29,226,000	28,728,000	30,690,000
November	28,560,000	28,260,000	30,106,000	29,515,000	29,153,000	29,847,000	28,054,000	26,857,000	28,125,000	27,138,000	27,535,000	28,446,000	25,364,000	26,585,000
December	30,503,000	29,133,000	32,786,000	31,086,000	30,102,000	31,435,000	29,568,000	28,931,000	29,257,000	28,643,000	27,863,000	29,847,000	26,710,000	27,194,000
January	30,343,000	29,602,000	31,223,000	29,411,000	30,340,000	32,444,000	29,383,000	28,123,000	28,401,000	28,846,000	28,427,000	31,265,000	28,505,000	27,915,000
February	27,216,000	28,755,000	26,768,000	27,510,000	29,078,000	29,470,000	26,629,000	25,005,000	24,988,000	26,635,000	24,308,000	29,230,000	25,484,000	26,048,000
March	29,488,000	30,315,000	30,025,000	29,905,000	30,362,000	31,094,000	28,408,000	27,945,000	27,909,000	28,911,000	27,862,000	29,917,000	28,779,000	26,552,000
April	29,845,000	29,350,000	29,478,000	30,452,000	29,468,000	30,239,000	27,193,000	27,793,000	27,145,000	34,220,000	27,514,000	28,101,000	25,255,000	26,791,000
<b>TOTAL</b>	<b>417,366,000</b>	<b>395,115,000</b>	<b>406,581,000</b>	<b>441,564,000</b>	<b>405,464,000</b>	<b>424,902,000</b>	<b>385,043,000</b>	<b>366,648,000</b>	<b>374,378,000</b>	<b>376,913,000</b>	<b>396,074,000</b>	<b>384,695,000</b>	<b>348,352,000</b>	<b>352,856,000</b>

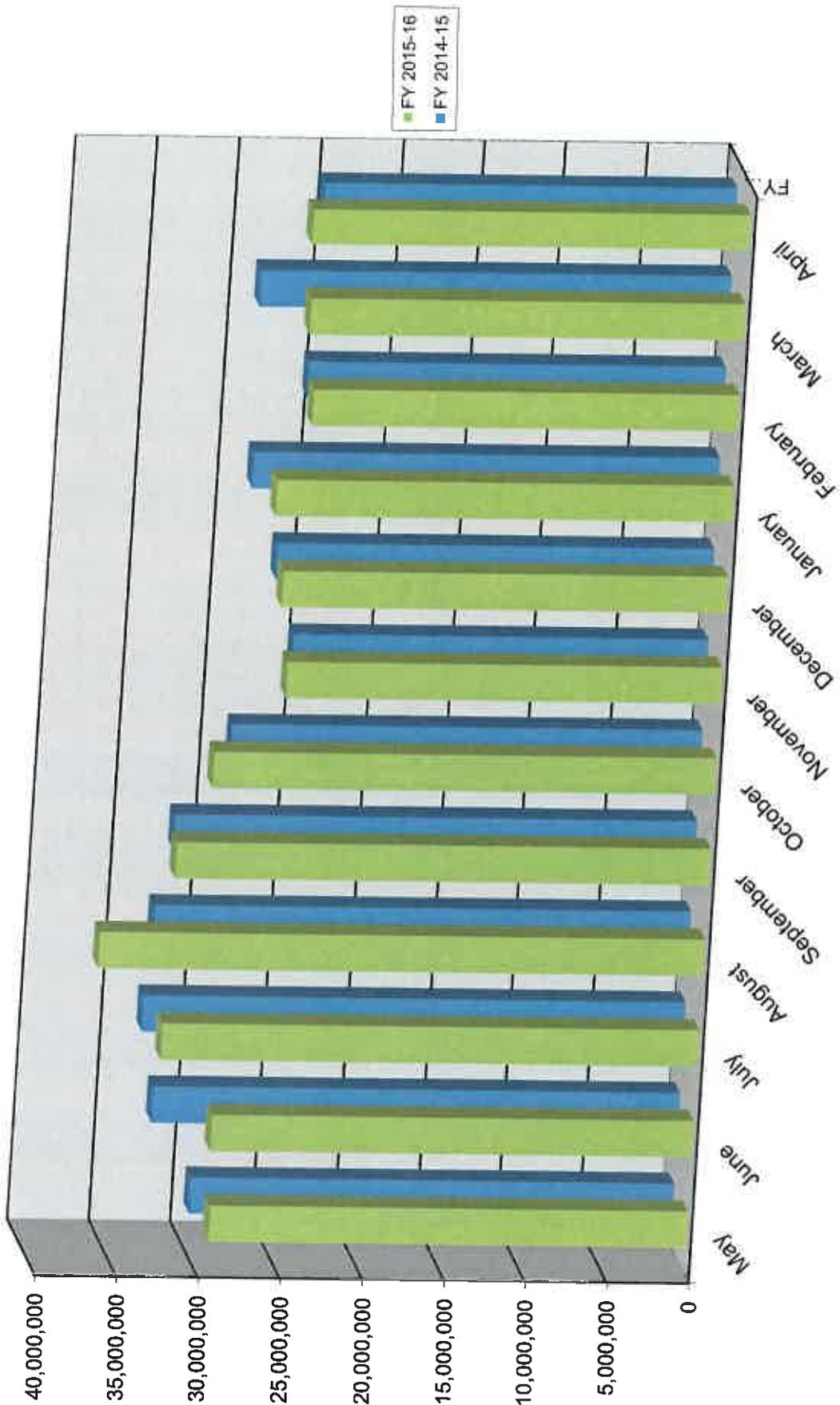
YEAR TO DATE LAST YEAR (gallons):	348,352,000
YEAR TO DATE THIS YEAR (gallons):	<u>352,856,000</u>
DIFFERENCE (gallons):	<u>4,504,000</u>
PERCENTAGE DIFFERENCE (+/-):	1.29%
FY15/16 PUMPAGE PROJECTION (gallons):	350,000,000
FY15/16 GALLONS PUMPED TO DATE:	<u>352,856,000</u>
CURRENT PERCENTAGE PUMPED COMPARED TO	<b>100.82%</b>

All table figures are in millions of gallons sold on a monthly basis per fiscal year.

# Village of Willowbrook Pumpage Report



Monthly Pumpage Chart



# CITY OF Willowbrook

## MONTHLY DATA REPORT

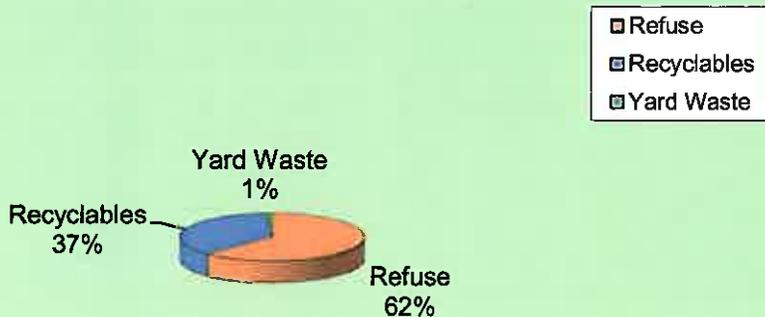
### Tons Collected by Month

	Tons Collected by Month			Recycling Detail	
	Refuse	Recyclables	Yard Waste	Paper Fiber	Commingled Containers
January-16	68.44	45.86		31.92	13.94
February-16	68.10	43.13		30.02	13.11
March-16	81.95	46.75		32.54	14.21
April-16	67.30	40.18	2.78	27.97	12.21
May-16	94.38	47.60	4.10	33.13	14.47
June-16				0.00	0.00
July-16				0.00	0.00
August-16				0.00	0.00
September-16				0.00	0.00
October-16				0.00	0.00
November-16				0.00	0.00
December-16				0.00	0.00
<b>Totals</b>	<b>380.17</b>	<b>223.52</b>	<b>6.88</b>	<b>155.59</b>	<b>67.93</b>
<b>Monthly Average</b>	<b>76.03</b>	<b>44.70</b>	<b>3.44</b>	<b>12.97</b>	<b>5.66</b>
<b>Weekly Average</b>	<b>17.55</b>	<b>10.32</b>	<b>0.79</b>	<b>2.99</b>	<b>1.31</b>

Email To:

[ghummel@willowbrook.il.us](mailto:ghummel@willowbrook.il.us)

### Percentage of Materials Collected





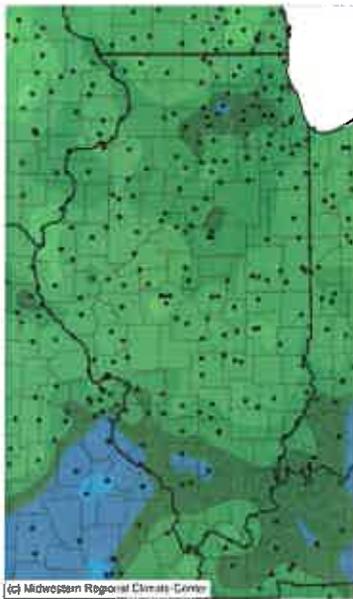
# Village of Willowbrook May 2016 - Status Report

## Season Perspective

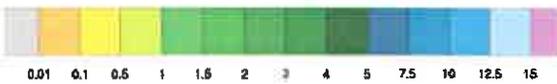
Weather conditions critically affect the seasonal mosquito population. Excessive rainfall periods trigger hatches of floodwater mosquitoes (*Aedes vexans*), the dominant annoyance species in northern Illinois that has a flight range of 15 to 20 miles. The other target species is the northern house mosquito (*Culex pipiens*), the primary vector of West Nile virus (WNV) that flourishes under stagnant water drought conditions.

The Illinois State Water Survey map for May shows excessive precipitation in northern Illinois. Including the heavy storms prior to Memorial Day weekend, many areas received over 6 inches of rain for the month. Saturated soil moisture conditions set the stage for an above average season for the floodwater mosquito. As shown by the National Weather Service temperature map, above normal temperatures are predicted for June. As a result, a series of back-to-back floodwater mosquito broods are anticipated to arrive in June to cause significant annoyance conditions.

Accumulated Precipitation (in)  
May 01, 2016 to May 23, 2016

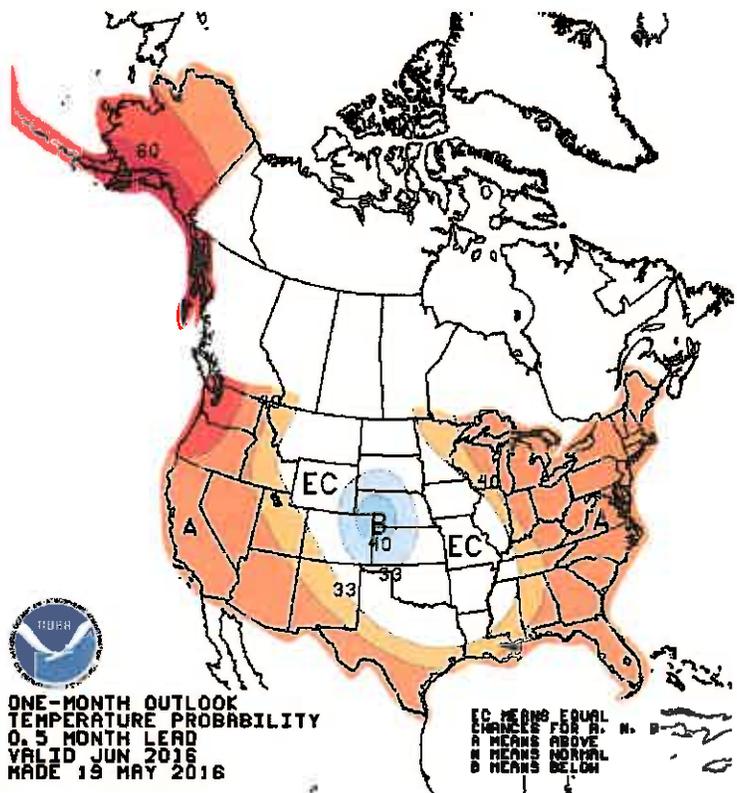


(c) Midwestern Regional Climate Center



Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI,

Midwestern Regional Climate Center  
cli-MATE: MRCC Application Tools Environment  
Generated at: 5/23/2016 10:48:58 AM CDT



ONE-MONTH OUTLOOK  
TEMPERATURE PROBABILITY  
0.5 MONTH LEAD  
VALID JUN 2016  
MADE 19 MAY 2016

EC MEANS EQUAL CHANCES FOR A, B, OR C  
A MEANS ABOVE NORMAL  
N MEANS NORMAL  
B MEANS BELOW NORMAL



**Mosquito-Borne Disease Update**

**West Nile Virus (WNV)**

In 2015 a total of 48 states and the District of Columbia reported West Nile virus infections in people, birds, or mosquitoes in 2015. Overall, 2,060 cases of West Nile virus disease in people were reported to CDC, including 119 fatalities. Of these, 1,360 (66%) were classified as neuroinvasive disease (such as meningitis or encephalitis) and 700 (34%) were classified as non-neuroinvasive disease.

On May 31st, IDPH reported the first WNV+ sample by North Shore MAD in Glenview.

**Zika Virus (ZIKV)**

As of May 18, 2016, the CDC has reported 544 travel-associated human cases of ZIKV in the United States, 10 of which were sexually transmitted. Florida has confirmed the most ZIKV travel-associated cases (109), and Illinois 16. No local transmission of ZIKV from mosquitoes to humans has been reported in the continental United States.

U.S. territories (U.S. Virgin Islands, American Samoa, and Puerto Rico) have reported 836 ZIKV human cases.

**Brood Prediction**

The floodwater mosquito (*Aedes vexans*) is the key nuisance species in the Chicagoland area. Distinct hatches of floodwater mosquito populations, or broods, are triggered by significant rainfall events. The Clarke Brood Prediction Model calculates peak annoyance periods based on rainfall and temperature data collected from weather stations in your area.

Weather Station Name	Rainfall Date	Rain Amount (inches)	Brood Prediction Date
Du Page Co.	04/27/2016	1.02	05/11/2016
Du Page Co.	04/30/2016	0.67	05/27/2016
Du Page Co.	05/03/2016	0.40	05/29/2016
Du Page Co.	05/10/2016	0.72	05/30/2016
Du Page Co.	05/11/2016	1.73	05/30/2016
Du Page Co.	05/13/2016	0.66	06/01/2016
Du Page Co.	05/25/2016	0.57	06/08/2016
Du Page Co.	05/31/2016	0.59	06/14/2016

**Upcoming June Operations**

2 Targeted Inspections



**Recommendations**

The CDC currently shows a risk category 1. Biting adult mosquitoes activity and limited or sporadic epizootic activity in birds or mosquitoes. Conduct Integrated Vector Management program to monitor and reduce vector mosquito abundance. Conduct environmental surveillance to monitor virus activity (mosquitoes, sentinel chickens, avian mortality, etc.) Initiate community outreach and public education programs focused on personal protection and residential source reduction.

**New Jersey Light Trap Counts**

(\*Red numbers indicate an annoyance level)

Trap Location	May 16	May 18	May 20	May 23	May 25	May 27	May 30
Willowbrook Community Park Midway Dr	0	Mal	0	1	3	Mal	Mal

\*Mal- Trap Malfunction

**Operation and Surveillance Reports**

Below is a report outlining all services performed in the month of May. These services could include the following:

- **0952 N. J. Light Trap Seasonal Service:** *Seasonal Light Trap Service for adult mosquito population monitoring.*
- **1252 Complete Site Larval Inspection Service:** *Inspection service of all potential mosquito larvae development sites.*
- **1302 Targeted Site Larval Inspection:** *Inspection of all targeted larval development sites.*
- **1352 Larval Site Service Call:** *Special inspection of standing water for mosquito breeding per hot line request.*
- **1502 Ground Prehatch:** *Ground prehatch for control of mosquito larvae.*
- **1752 Backpack Larviciding:** *Backpack larviciding for biological control of mosquito larvae sites.*
- **1754 Hand Larviciding:** *Hand equipment larviciding for biological control of mosquito larvae.*
- **2019 Altosid XR CB Bike - 150 day:** *Catch Basin treatment for larval control.*
- **2202 Helicopter Prehatch Appl:** *Helicopter prehatch application for larval control.*

**Services Performed May 2016:**

Service Item	Start Date
ROS0952 - N.J. Light Trap Seasonal Serv	04/20/2016
ROS2020 - Altosid XR BYCB Bike - 150 day	04/25/2016
ROS1302 - Targeted Site Larval Insp Serv	05/03/2016
ROS1352 - Larval Site Service Call	05/16/2016
ROS1252 - Complete Site Larval Insp Serv	05/25/2016